

КАТАЛОГ ВЕНТИЛЯТОРЫ SUNON МИНСК

www.fotorele.net www.tiristor.by

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DATASHEET, ПАРАМЕТРЫ, ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ.

Dustproof



Waterproof



IP56/68 Rating

Dustproof & Waterproof Fan Series

IP-68

- 8 : Protection against permanent immersion
- 6 : Complete protection against dust

Size (mm)	Model (IP56)	Model (IP68)	Voltage (VDC)	Bearing 2 BALL	Speed (RPM)	Air Flow (CFM)	Static Pressure (Inch-H2O)	Noise (db(A))	Weight (g)
60x60x15	GF60151B6-1E00U-AC9	GF60151B6-1E00U-AE9	12	☉	4500	21.3	0.18	34.5	47.0
	GF60151B7-1E00U-AC9	GF60151B7-1E00U-AE9	12	☉	3900	18.2	0.13	29.8	47.0
	GF60151B8-1E00U-AC9	GF60151B8-1E00U-AE9	12	☉	3200	14.5	0.09	24.9	47.0
	GF60151B9-1E00U-AC9	GF60151B9-1E00U-AE9	12	☉	2300	10.6	0.05	17.1	47.0
Ø84.9X15.4	GF60151B9-1E01U-AC9	GF60151B9-1E01U-AE9	12	☉	2200	9.8	0.05	17.1	45.0
	GF80251B1-000U-AC9	GF80251B1-000U-AE9	12	☉	4800	60.0	0.41	47.5	105.0
	GF80251B2-000U-AC9	GF80251B2-000U-AE9	12	☉	4500	57.0	0.35	46.0	105.0
	GF80251B3-000U-AC9	GF80251B3-000U-AE9	12	☉	4200	53.0	0.30	44.5	105.0
	GF80251B5-000U-AC9	GF80251B5-000U-AE9	12	☉	3200	41.0	0.18	33.0	87.0
	GF80251B6-000U-AC9	GF80251B6-000U-AE9	12	☉	2900	37.0	0.15	30.0	87.0
	GF80251B7-000U-AC9	GF80251B7-000U-AE9	12	☉	2600	33.0	0.11	28.0	87.0
	GE80252B1-000U-AC9	GE80252B1-000U-AE9	24	☉	4800	60.0	0.41	47.5	105.0
	GE80252B2-000U-AC9	GE80252B2-000U-AE9	24	☉	4500	57.0	0.35	46.0	105.0
	GE80252B3-000U-AC9	GE80252B3-000U-AE9	24	☉	4200	53.0	0.30	44.5	105.0
	GF80252B5-000U-AC9	GF80252B5-000U-AE9	24	☉	3200	41.0	0.18	33.0	87.0
	GF80252B6-000U-AC9	GF80252B6-000U-AE9	24	☉	2900	37.0	0.15	30.0	87.0
	GF80252B7-000U-AC9	GF80252B7-000U-AE9	24	☉	2600	33.0	0.11	28.0	87.0
	GE80254B1-000U-AC9	GE80254B1-000U-AE9	48	☉	4800	60.0	0.41	47.5	105.0
	GE80254B2-000U-AC9	GE80254B2-000U-AE9	48	☉	4500	57.0	0.35	46.0	105.0
	GE80254B3-000U-AC9	GE80254B3-000U-AE9	48	☉	4200	53.0	0.30	44.5	105.0
80x80x32	GF80321B1-000U-AC9	GF80321B1-000U-AE9	12	☉	4800	59.4	0.36	45.2	109.0
	GF80321B2-000U-AC9	GF80321B2-000U-AE9	12	☉	4500	55.9	0.32	43.1	109.0
	GF80321B3-000U-AC9	GF80321B3-000U-AE9	12	☉	4100	50.3	0.27	41.1	109.0
92x92x25	GF92251B1-000U-AC9	GF92251B1-000U-AE9	12	☉	4500	75.0	0.35	47.0	113.0
	GF92251B2-000U-AC9	GF92251B2-000U-AE9	12	☉	4200	70.0	0.30	45.0	113.0
	GF92251B3-000U-AC9	GF92251B3-000U-AE9	12	☉	3900	65.0	0.25	43.0	113.0
	GF92251B5-000U-AC9	GF92251B5-000U-AE9	12	☉	3000	51.5	0.15	34.0	99.0
	GF92251B6-000U-AC9	GF92251B6-000U-AE9	12	☉	2700	45.0	0.13	32.0	99.0
	GF92251B7-000U-AC9	GF92251B7-000U-AE9	12	☉	2400	39.5	0.10	28.0	99.0
	GE92252B1-000U-AC9	GE92252B1-000U-AE9	24	☉	4500	75.0	0.35	47.0	113.0
	GE92252B2-000U-AC9	GE92252B2-000U-AE9	24	☉	4200	70.0	0.30	45.0	113.0
	GE92252B3-000U-AC9	GE92252B3-000U-AE9	24	☉	3900	65.0	0.25	43.0	113.0
	GF92252B5-000U-AC9	GF92252B5-000U-AE9	24	☉	3000	51.5	0.15	34.0	99.0
	GF92252B6-000U-AC9	GF92252B6-000U-AE9	24	☉	2700	45.0	0.13	32.0	99.0
	GF92252B7-000U-AC9	GF92252B7-000U-AE9	24	☉	2400	39.5	0.10	28.0	99.0
	GE92254B1-000U-AC9	GE92254B1-000U-AE9	48	☉	4500	75.0	0.35	47.0	113.0
	GE92254B2-000U-AC9	GE92254B2-000U-AE9	48	☉	4200	70.0	0.30	45.0	113.0
	GE92254B3-000U-AC9	GE92254B3-000U-AE9	48	☉	3900	65.0	0.25	43.0	113.0



Meets GR487

For salt spray environment

Environmental Test : Meets GR-487-CORE(2000), Section3.34.1 Salt Fog Test Procedure.

■ Application : Telecom / Inverter / Outdoor LED Lighting

Size (mm)	Model	Voltage (VDC)	Bearing ● 2 BALL	Speed (RPM)	Air Flow (CFM)	Static Pressure (Inch-H ₂ O)	Noise (db(A))	Weight (g)
80x80x25	GF80251B5-000U-AD9	12	●	3200	41.0	0.18	33.0	87.0
	GF80251B6-000U-AD9	12	●	2900	37.0	0.15	30.0	87.0
	GF80251B7-000U-AD9	12	●	2600	33.0	0.11	28.0	87.0
	GF80252B5-000U-AD9	24	●	3200	41.0	0.18	33.0	87.0
	GF80252B6-000U-AD9	24	●	2900	37.0	0.15	30.0	87.0
	GF80252B7-000U-AD9	24	●	2600	33.0	0.11	28.0	87.0
92x92x25	GF92251B5-000U-AD9	12	●	3000	51.5	0.15	34.0	99.0
	GF92251B6-000U-AD9	12	●	2700	45.0	0.13	32.0	99.0
	GF92251B7-000U-AD9	12	●	2400	39.5	0.10	28.0	99.0
	GF92252B5-000U-AD9	24	●	3000	51.5	0.15	34.0	99.0
	GF92252B6-000U-AD9	24	●	2700	45.0	0.13	32.0	99.0
	GF92252B7-000U-AD9	24	●	2400	39.5	0.10	28.0	99.0

Server. Storage. Telecom Cooling Solution

*All products are RoHS compliant.



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DC Fan		
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40X40X56	26.9 ~ 31.7	p.15
60X60X38	54.1 ~ 75.2	p.19
60X60X56	58.5 ~ 72.9	p.23
60X60X76	58.7 ~ 73.2	p.25
80X80X38	105.8 ~ 141.9	p.27
80X80X80	122 ~ 151.5	p.31
92X92X38	138.1 ~ 182.4	p.33
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DC Blower		
Size (mm)	Air Flow (CFM)	Page
97X95X33	44.2 ~ 54.7	p.41

36x36x28 mm

18.1~22.8 CFM



■ Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(inch-H ₂ O)	(dB(A))	(g)	
PF36281BX-000U-A99	☉	12	800	9.60	23000	22.8	2.55	61.9	40.5	1
PF36281B1-000U-A99	☉	12	450	5.40	18400	18.1	1.62	55.7	40.5	2

■ Function

PF36281BX / 1

A99: AutoRestart

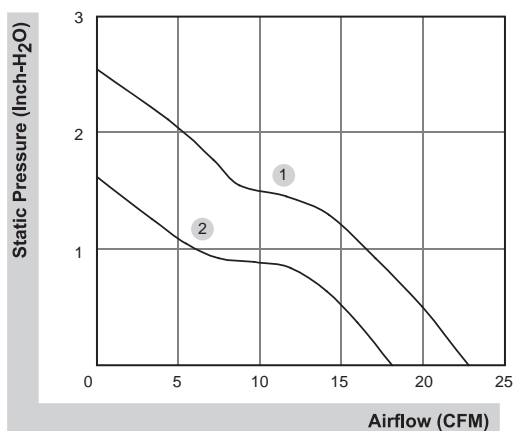
F99: AutoRestart and R type

G99: AutoRestart and F type

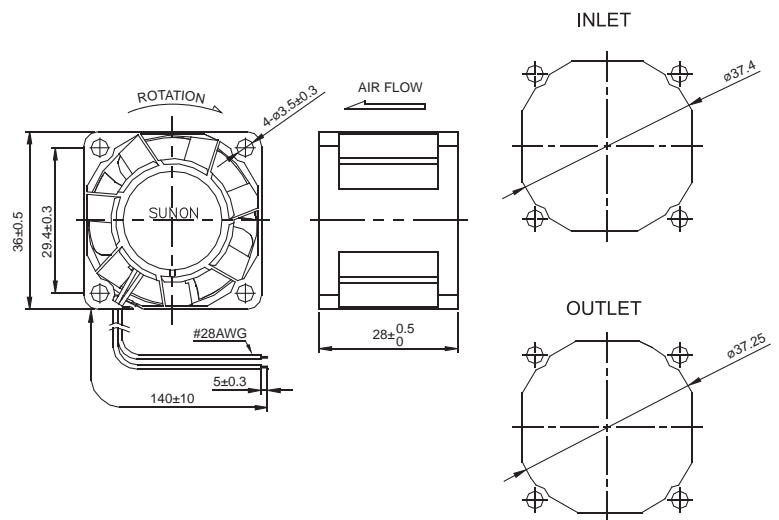
H99: AutoRestart and PWM

S99: AutoRestart , F type and with PWM

■ Air Flow-Static Pressure Characteristics



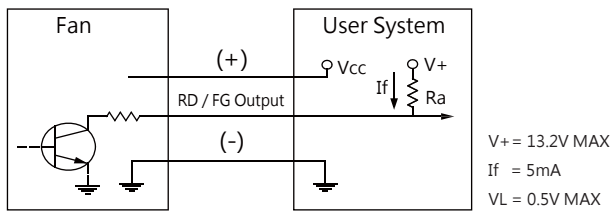
■ External dimensions(mm)



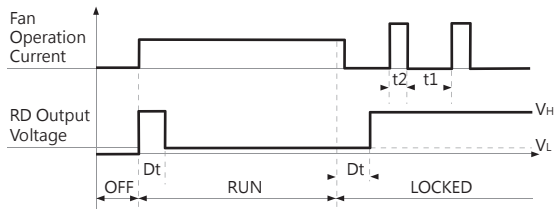
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

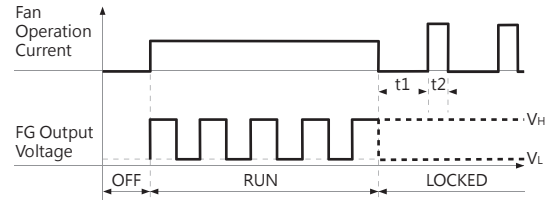
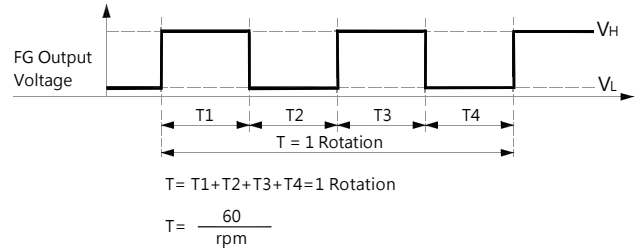
RD / FG Signal



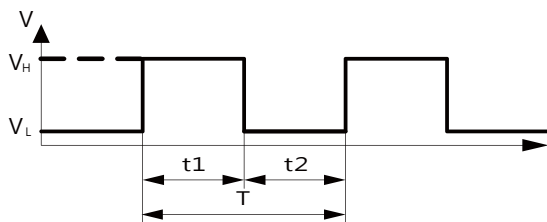
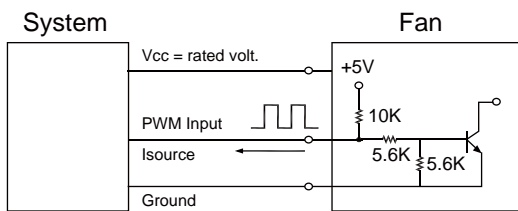
[RD Signal]



[FG Signal]



PWM Input Signal



1. Period :
$$T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$$

2. Duty Cycle (D.C.) :
$$\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$$

VH=2.3~5.5V

VL=0~0.8V

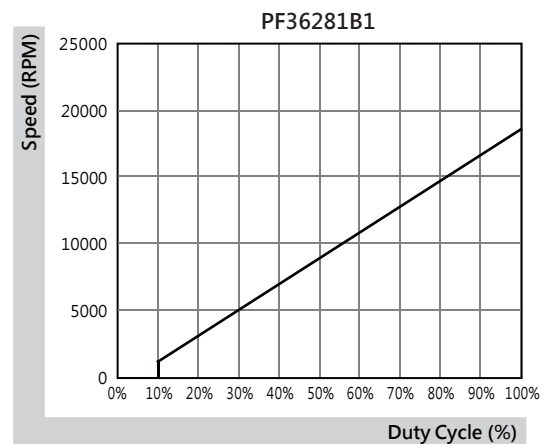
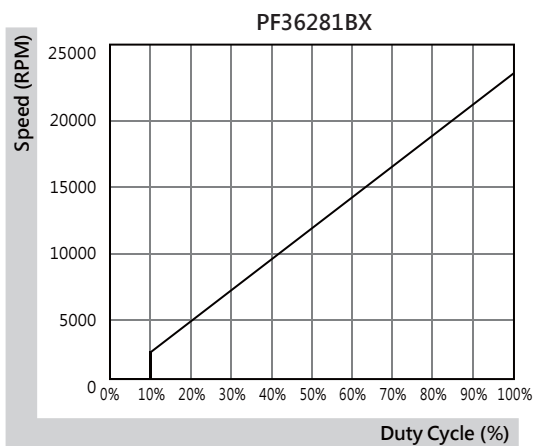
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

PWM Curve



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38x38x28 mm

18.9~24.2 CFM



■ Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(inch-H ₂ O)	(dB(A))	(g)	
VF38281BX-000U-A9H	☉	12	870	10.44	27000	24.2	4.10	61.6	44.0	1
VF38281B1-000U-A9H	☉	12	475	5.70	21600	18.9	2.50	58.1	44.0	2

■ Function

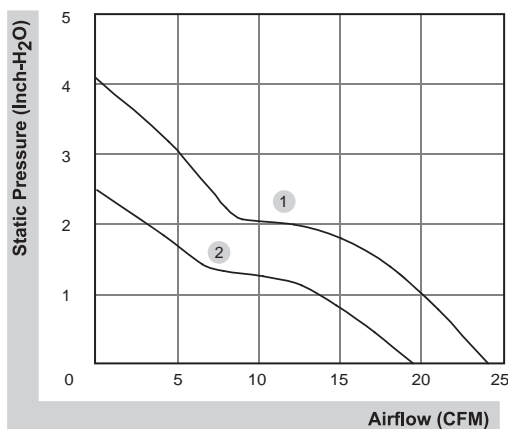
VF38281BX / 1

A9H: AutoRestart

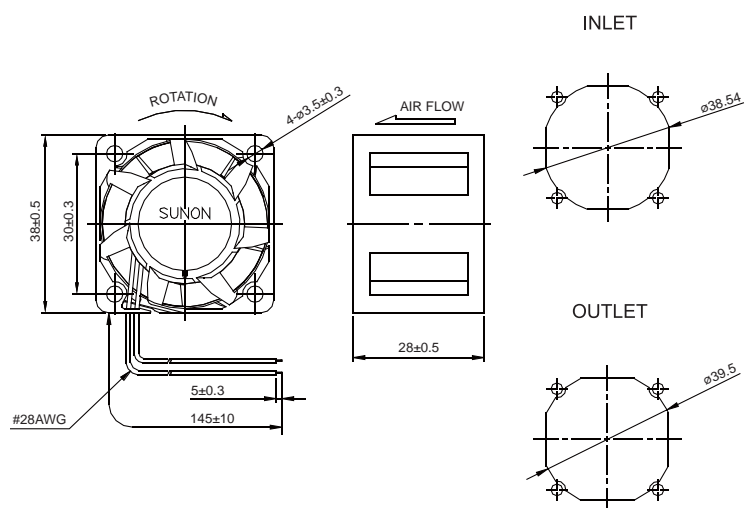
G9H: AutoRestart and F type

S9H: AutoRestart , F type and PWM

■ Air Flow-Static Pressure Characteristics



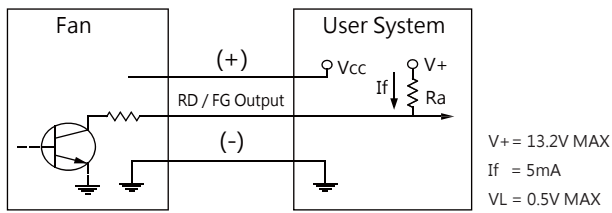
■ External dimensions(mm)



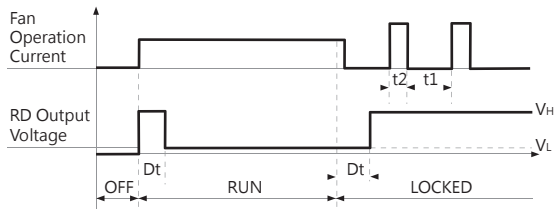
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

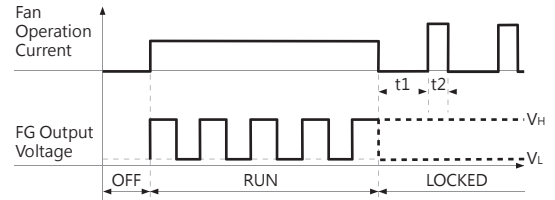
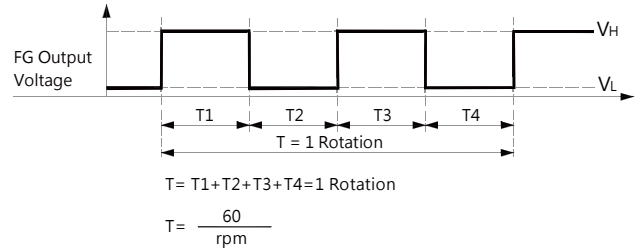
RD / FG Signal



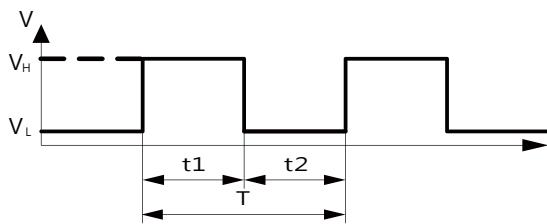
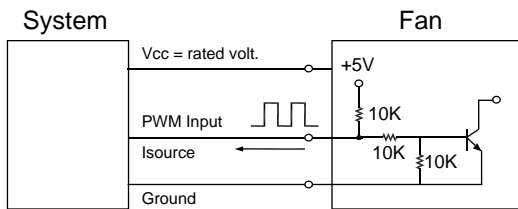
[RD Signal]



[FG Signal]



PWM Input Signal



1. Period :
$$T = \frac{1}{f_{\text{PWM}}} = t1 + t2(\text{sec})$$

2. Duty Cycle (D.C.) :
$$\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$$

VH=2.3~5.5V

VL=0~0.8V

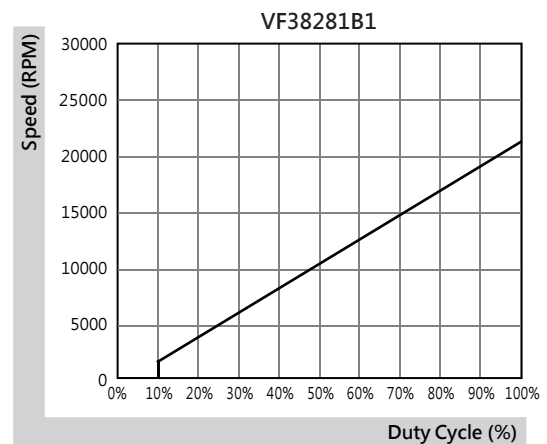
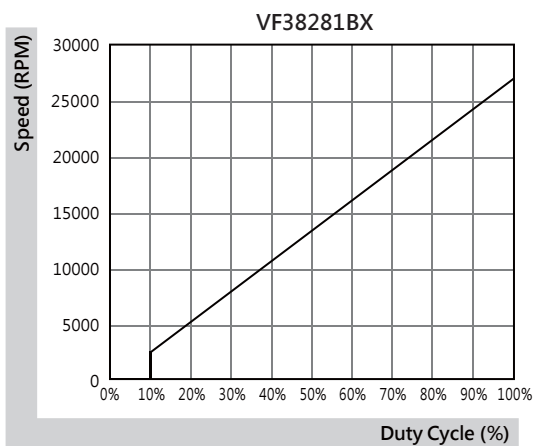
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

PWM Curve

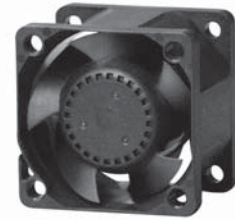


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38x38x28 mm

18.1 CFM



Specifications

	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	● VAPO	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(Inch-H ₂ O)	(dB(A))	(g)	
PF38281V1-000U-A99	●	12	574	6.89	16000	18.1	1.42	51.8	43.0	1

Function

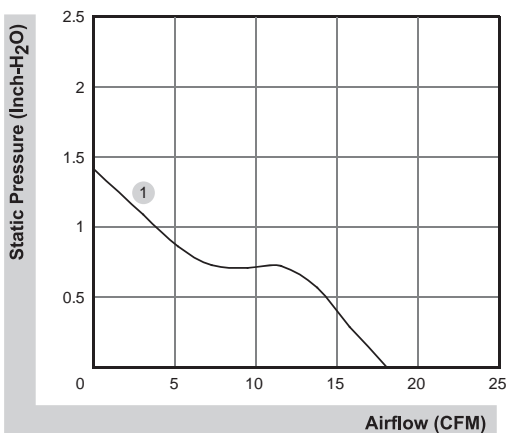
PF38281V1

A99: AutoRestart

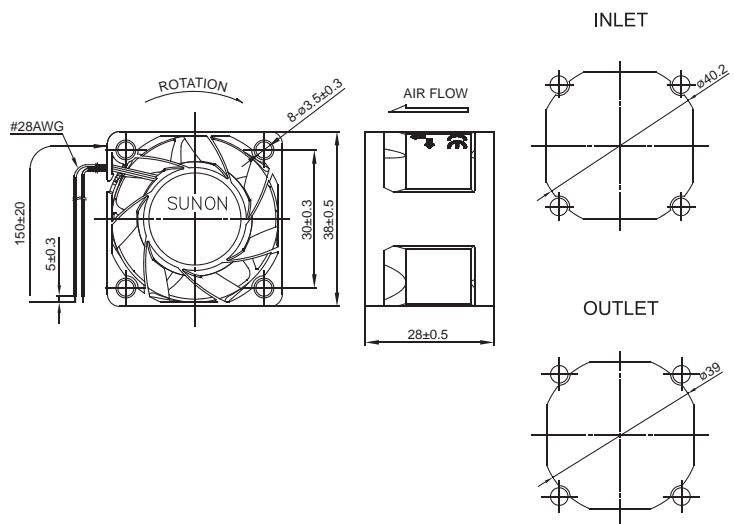
G99: AutoRestart and F type

S99: AutoRestart , F type and PWM

Air Flow-Static Pressure Characteristics



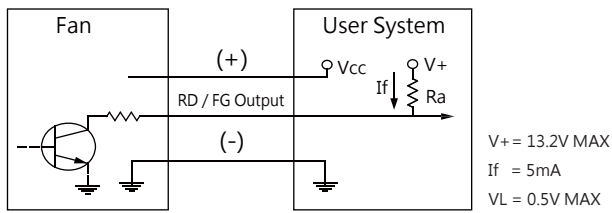
External dimensions(mm)



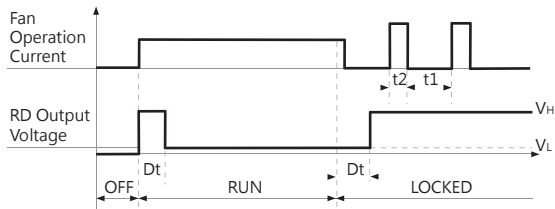
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

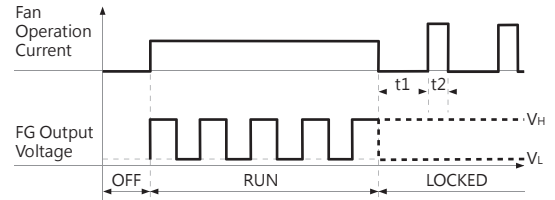
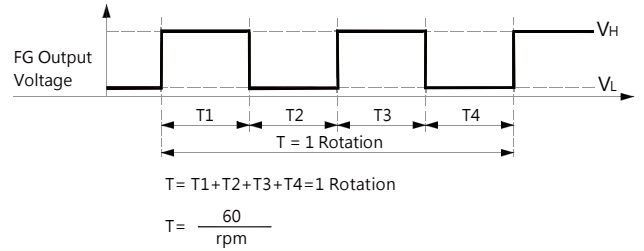
RD / FG Signal



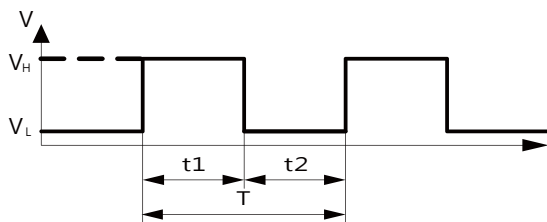
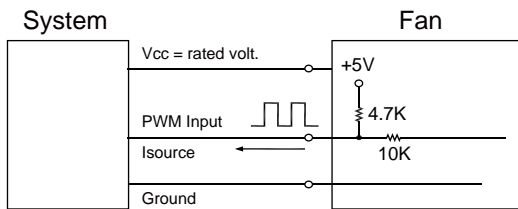
[RD Signal]



[FG Signal]



PWM Input Signal



1. Period :
$$T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$$

2. Duty Cycle (D.C.) :
$$\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$$

VH=2.3~5.5V

VL=0~0.8V

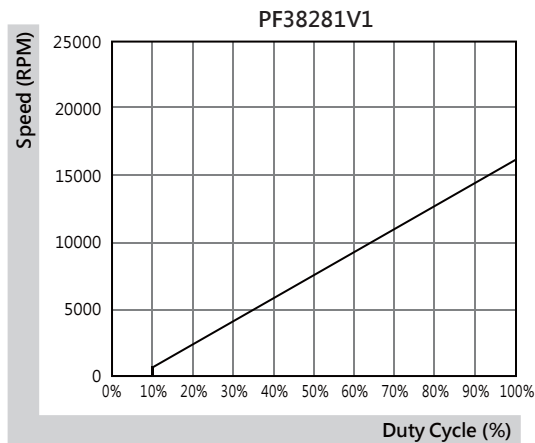
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

PWM Curve



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38x38x28 mm

11.3~23.0 CFM



Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(Inch-H ₂ O)	(dB(A))	(g)	
PF38281BX-000U-A99	☉	12	520	6.24	20000	23.0	2.23	57.0	41.0	1
PF38281B1-000U-A99	☉	12	315	3.78	16000	18.1	1.42	51.8	41.0	2
PF38281B2-000U-A99	☉	12	290	3.48	15000	16.9	1.26	51.0	40.0	3
PF38281B3-000U-A99	☉	12	194	2.33	13000	14.9	1.00	47.3	40.0	4
PF38281B4-000U-A99	☉	12	115	1.38	10000	11.3	0.60	40.8	40.0	5

Function

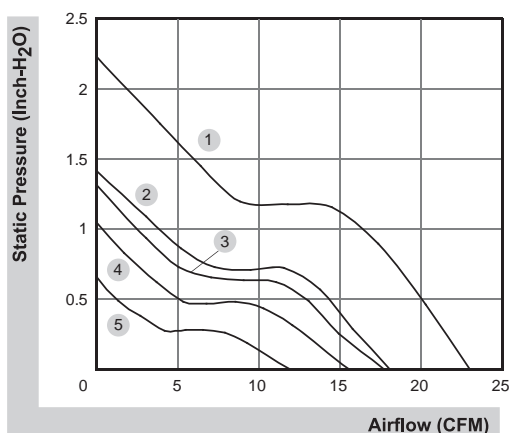
PF38281BX / 1

A99: AutoRestart
 F99: AutoRestart and R type
 G99: AutoRestart and F type
 H99: AutoRestart and PWM
 Q99: AutoRestart , R type and PWM
 S99: AutoRestart , F type and PWM

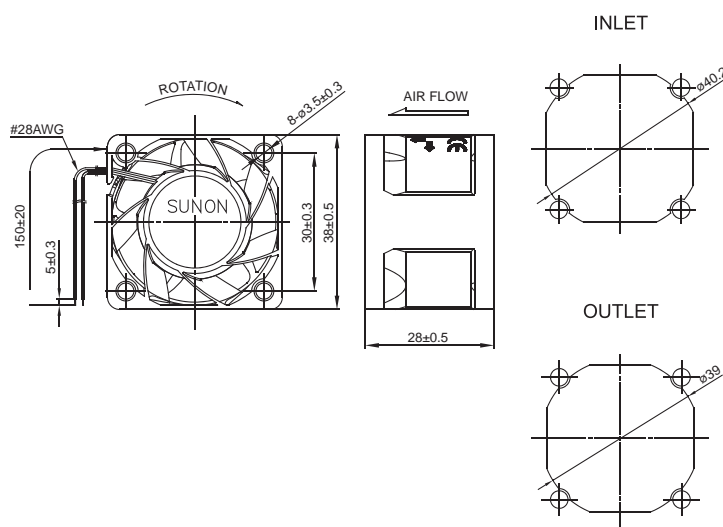
PF38281B2 / 3 / 4

A99: AutoRestart
 F99: AutoRestart and R type
 G99: AutoRestart and F type

Air Flow-Static Pressure Characteristics



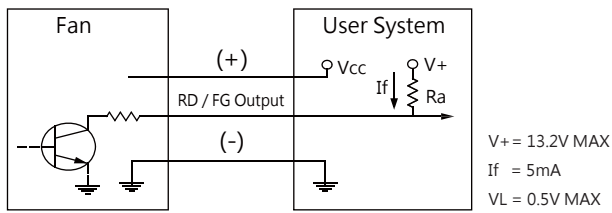
External dimensions(mm)



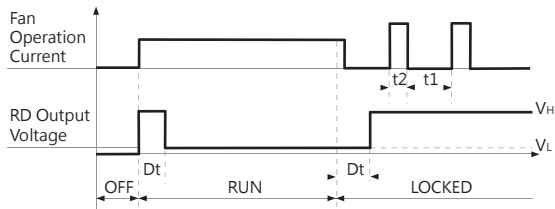
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*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

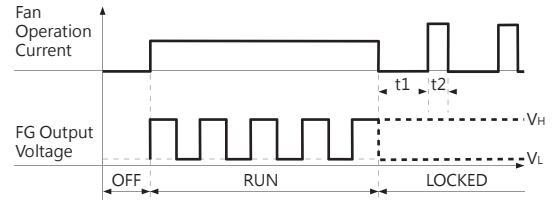
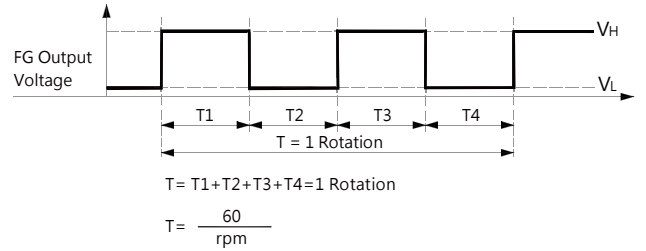
■ RD / FG Signal



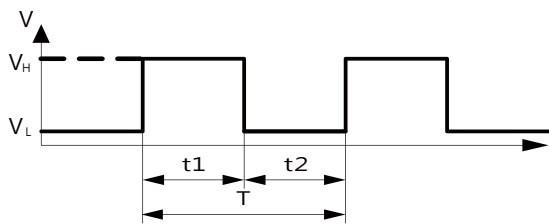
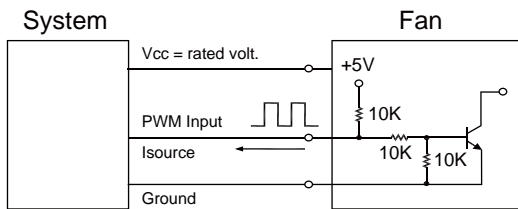
[RD Signal]



[FG Signal]



■ PWM Input Signal



1. Period : $T = \frac{1}{f_{\text{PWM}}} = t_1 + t_2(\text{sec})$

2. Duty Cycle (D.C.) : $\frac{t_1}{t_1 + t_2} * 100 = \frac{t_1}{T} * 100(\%)$

VH=2.3~5.5V

VL=0~0.8V

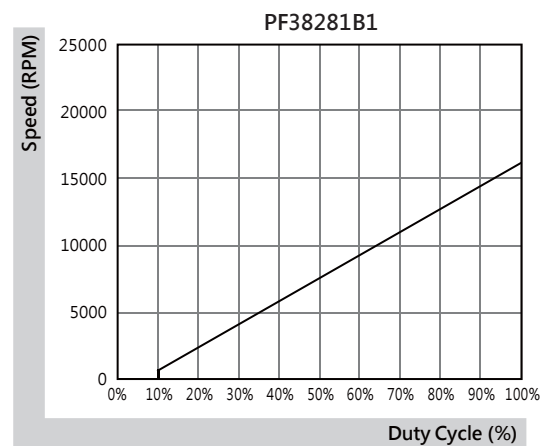
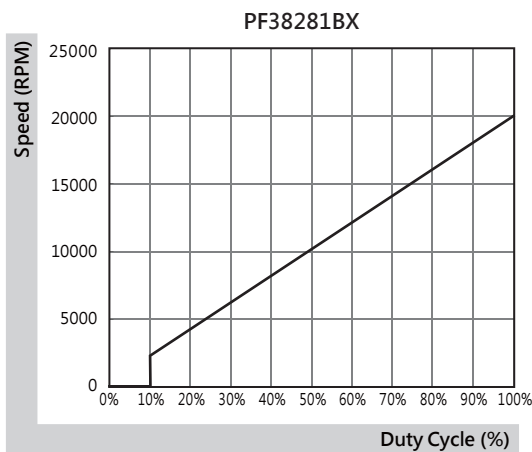
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve



*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

40x40x28 mm

25.6~31.5 CFM



■ Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(inch-H ₂ O)	(dB(A))	(g)	
VF40281BX-000U-A9H	☉	12	1140	13.68	27000	31.5	3.95	63.7	46.0	1
VF40281B1-000U-A9H	☉	12	630	7.56	21600	25.6	2.77	58.6	46.0	2

■ Function

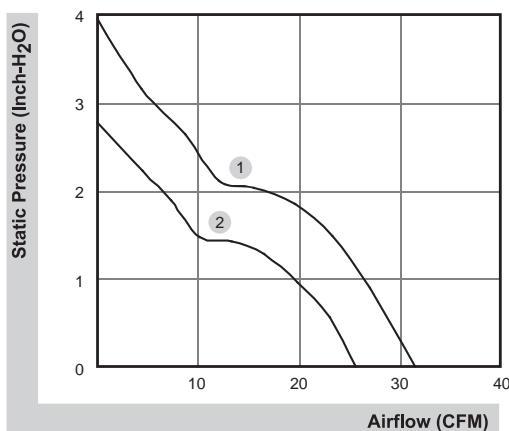
VF40281BX / 1

A9H: AutoRestart

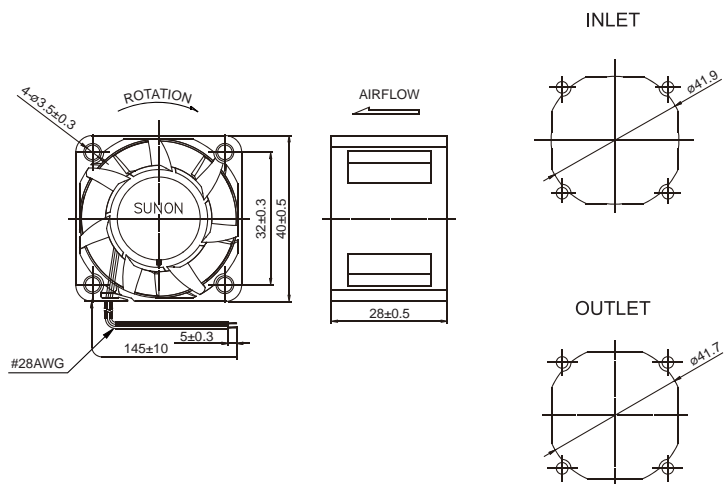
G9H: AutoRestart and F type

S9H: AutoRestart , F type and PWM

■ Air Flow-Static Pressure Characteristics



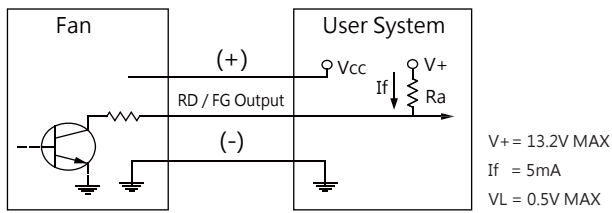
■ External dimensions(mm)



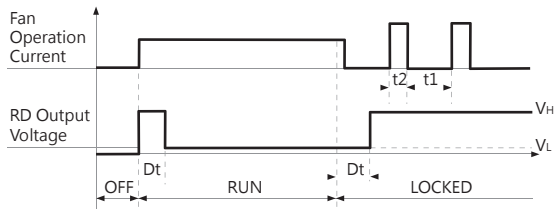
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

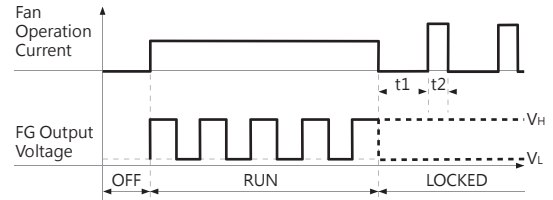
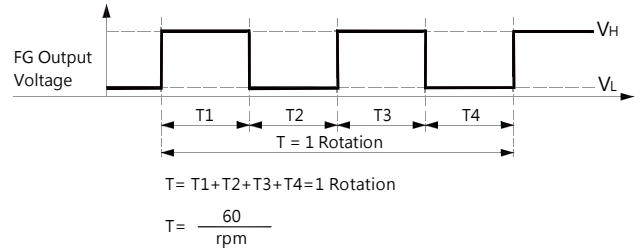
RD / FG Signal



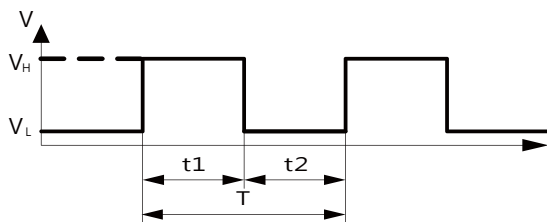
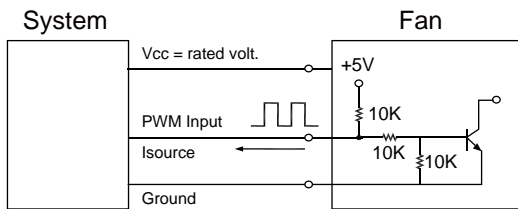
[RD Signal]



[FG Signal]



PWM Input Signal



1. Period :
$$T = \frac{1}{f_{\text{PWM}}} = t_1 + t_2 (\text{sec})$$

2. Duty Cycle (D.C.) :
$$\frac{t_1}{t_1 + t_2} * 100 = \frac{t_1}{T} * 100(\%)$$

VH=2.3~5.5V

VL=0~0.8V

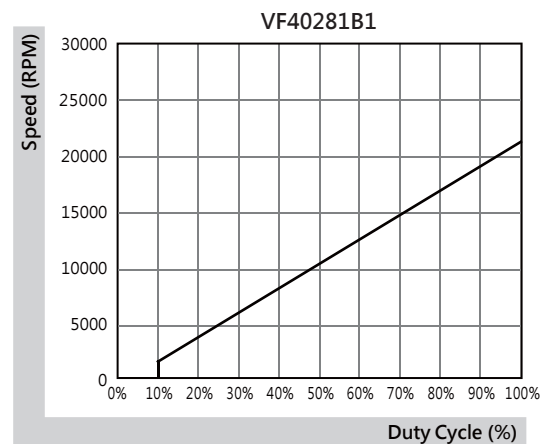
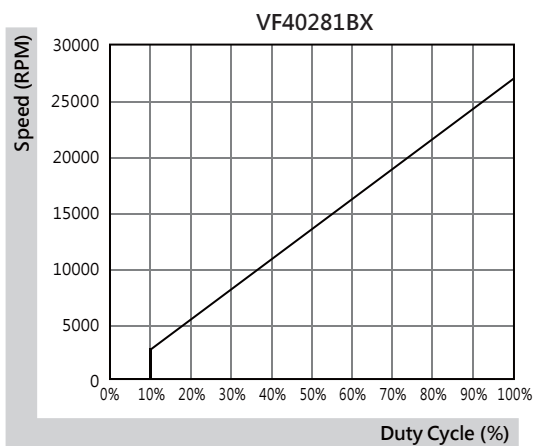
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

PWM Curve



*All model could be customized. Please contact with Sunon Sales.


*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

40x40x28 mm

24.9 CFM



■ Specifications

	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	VAPO	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(Inch-H ₂ O)	(dB(A))	(g)	
PF40281V1-000U-A99	●	12	740	8.88	17600	24.9	1.95	56.0	45.0	1

■ Function

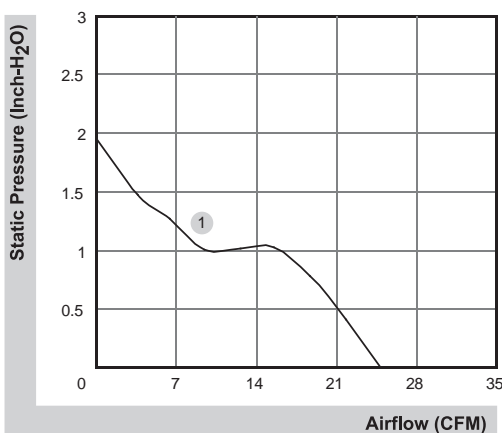
PF40281V1

A99: AutoRestart

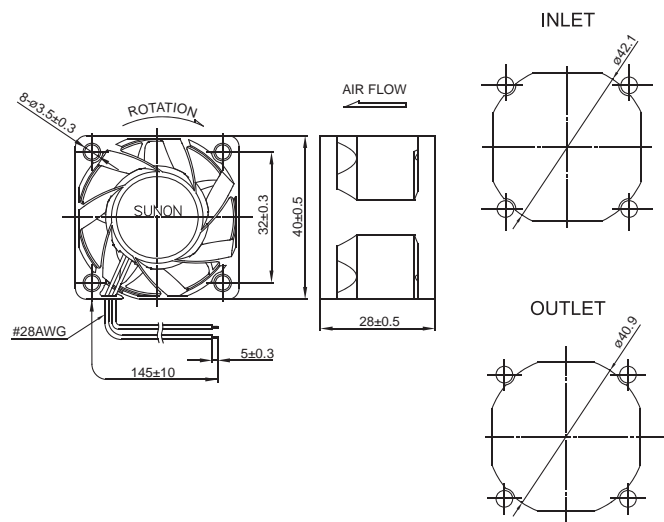
G99: AutoRestart and F type

S99: AutoRestart , F type and PWM

■ Air Flow-Static Pressure Characteristics



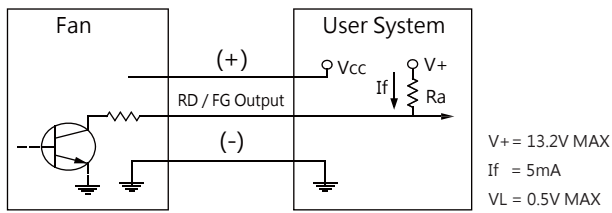
■ External dimensions(mm)



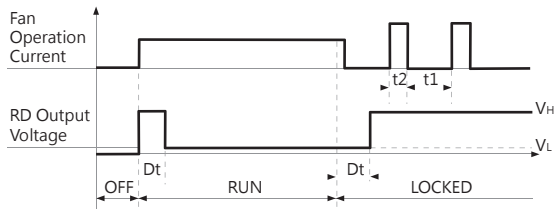
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

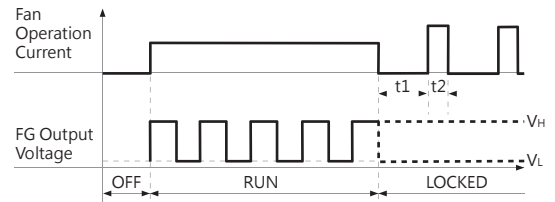
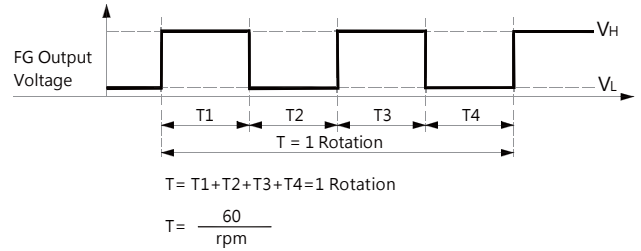
■ FG Signal



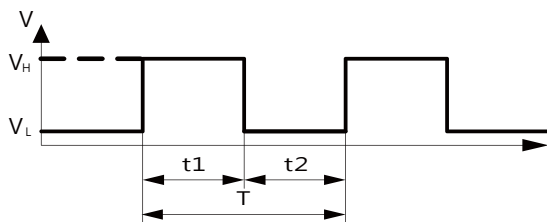
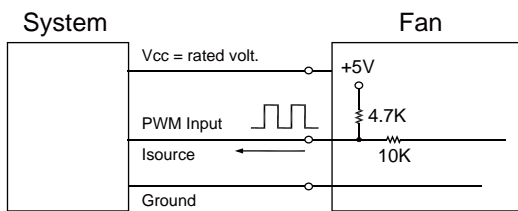
[RD Signal]



[FG Signal]



■ PWM Input Signal



1. Period : $T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$

2. Duty Cycle (D.C.) : $\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$

VH=2.3~5.5V

VL=0~0.8V

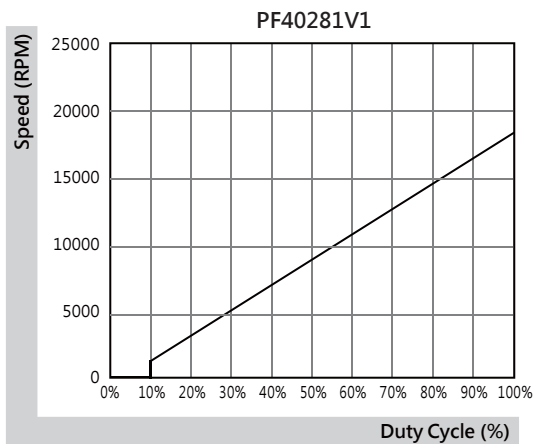
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve



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40x40x28 mm

12.8~31.3 CFM



■ Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(Inch-H ₂ O)	(dB(A))	(g)	
PF40281BX-000U-A99	☉	12	900	10.80	22000	31.3	2.81	62.0	42.0	1
PF40281B1-000U-A99	☉	12	510	6.12	17600	24.9	1.95	56.0	42.0	2
PF40281B2-000U-A99	☉	12	246	2.96	13000	18.0	1.10	48.7	45.0	3
PF40281B3-000U-A99	☉	12	162	1.95	11000	15.4	0.78	43.9	45.0	4
PF40281B4-000U-A99	☉	12	116	1.40	9200	12.8	0.54	39.9	45.0	5

■ Function

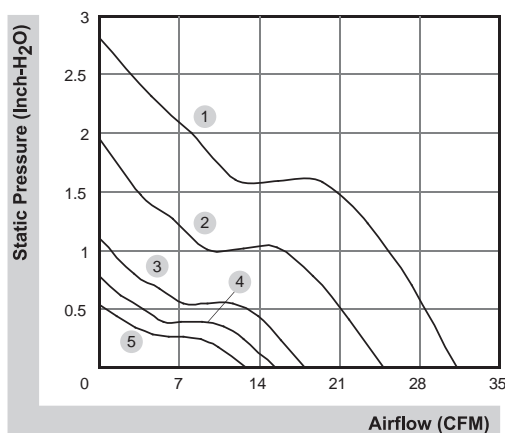
PF40281BX / 1

A99: AutoRestart
 F99: AutoRestart and R type
 G99: AutoRestart and F type
 H99: AutoRestart and PWM
 Q99: AutoRestart , R type and PWM
 S99: AutoRestart , F type and PWM

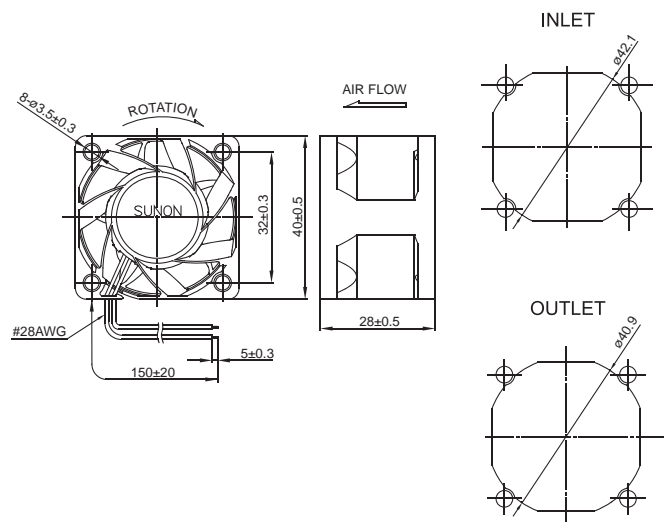
PF40281B2 / 3 / 4

A99: AutoRestart
 F99: AutoRestart and R type
 G99: AutoRestart and F type

■ Air Flow-Static Pressure Characteristics



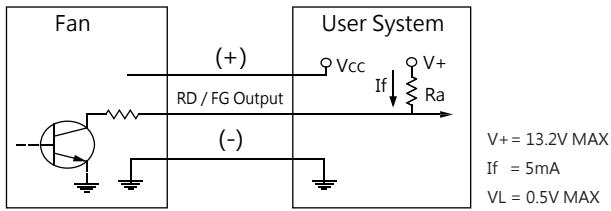
■ External dimensions(mm)



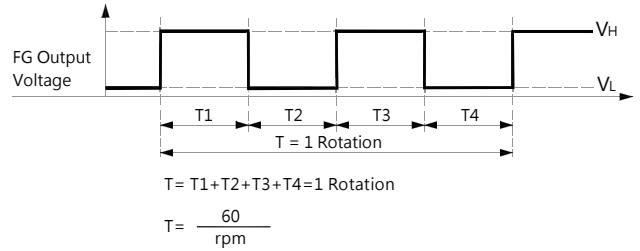
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

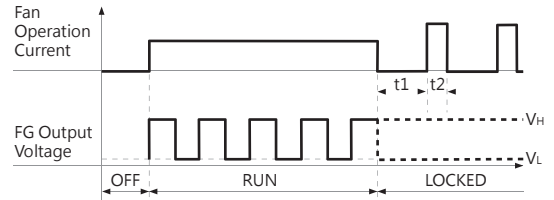
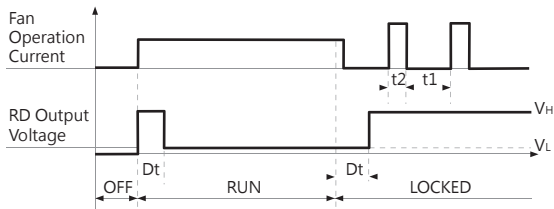
■ FG Signal



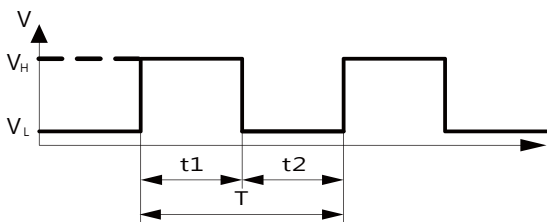
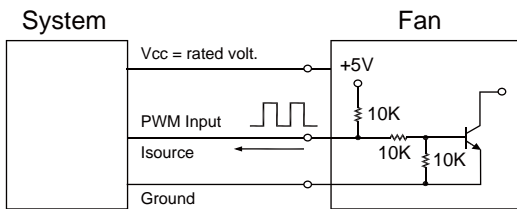
[FG Signal]



[RD Signal]



■ PWM Input Signal



1. Period : $T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$

2. Duty Cycle (D.C.) : $\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$

VH=2.3~5.5V

VL=0~0.8V

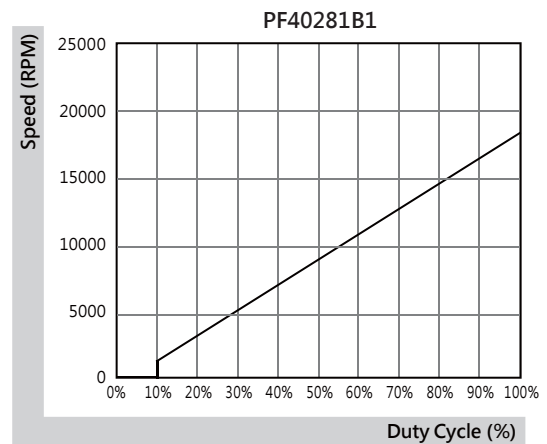
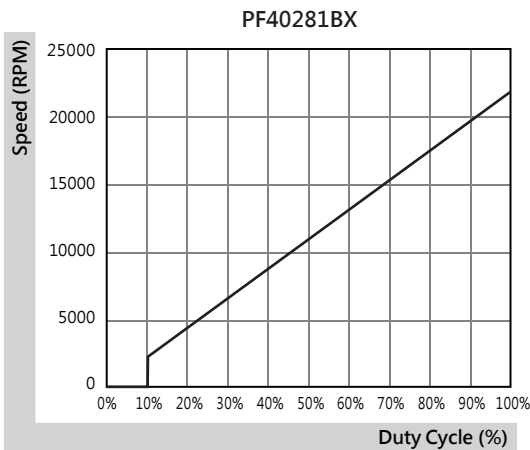
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve

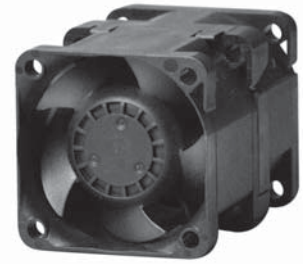


*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

40x40x56 mm

26.9~31.7 CFM



Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed in / out	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(Inch-H ₂ O)	(dB(A))	(g)	
PF40561BX-000U-A99	☉	12	1390	16.68	21500/18000	31.7	3.60	65.9	87.0	1
PF40561B1-000U-A99	☉	12	890	10.68	18000/15000	26.9	2.56	62.3	87.0	2

Function

PF40561BX / 1

A99: AutoRestart

F99: AutoRestart and R type

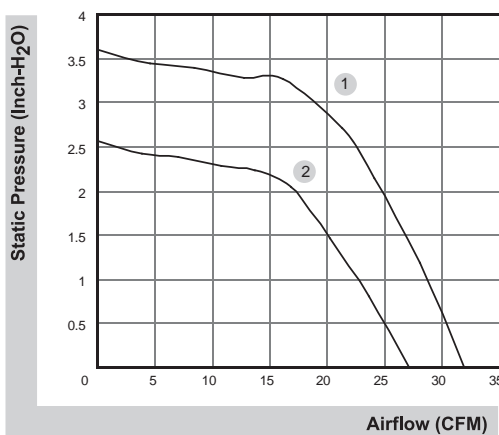
G99: AutoRestart and F type

H99: AutoRestart and PWM

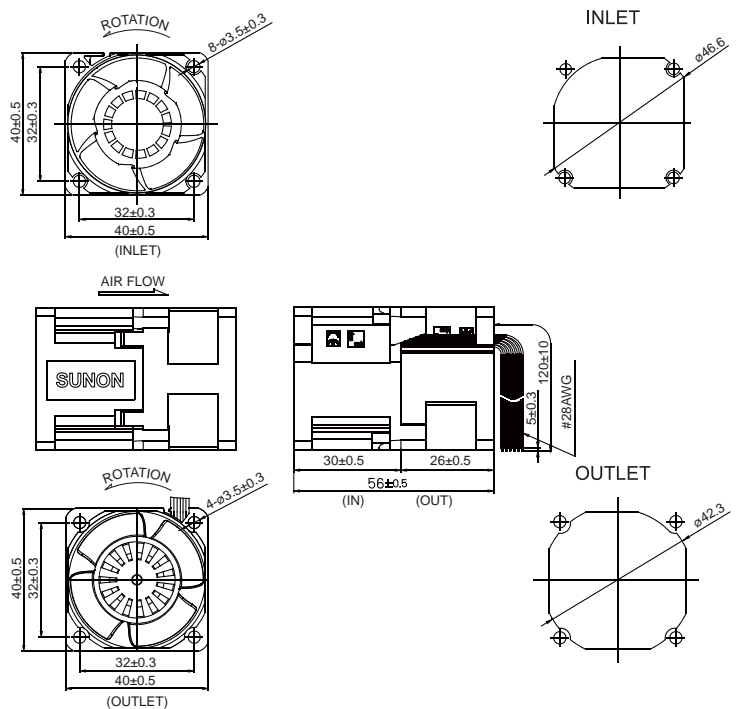
Q99: AutoRestart , R type and PWM

S99: AutoRestart , F type and PWM

Air Flow-Static Pressure Characteristics



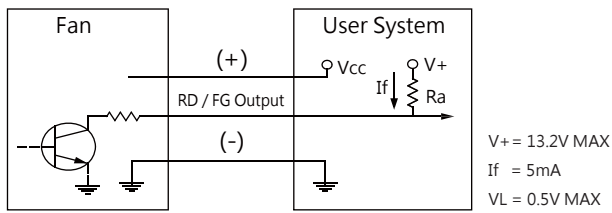
External dimensions(mm)



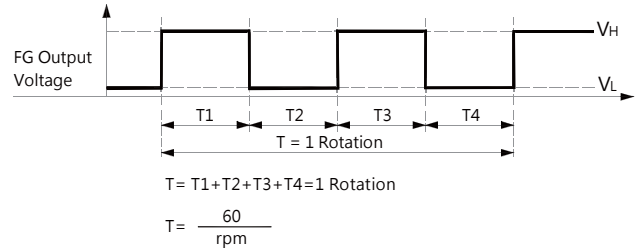
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

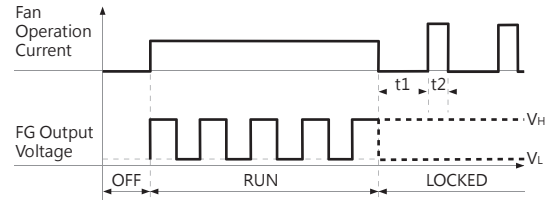
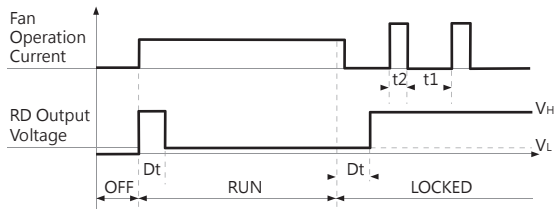
■ FG Signal



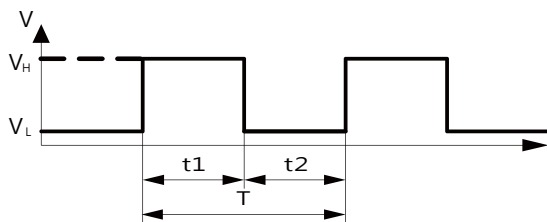
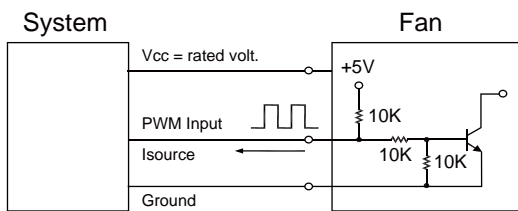
[FG Signal]



[RD Signal]



■ PWM Input Signal



1. Period :
$$T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$$

2. Duty Cycle (D.C.) :
$$\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$$

VH=2.3~5.5V

VL=0~0.8V

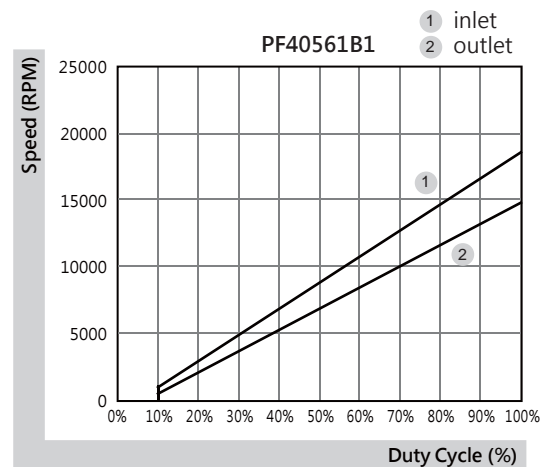
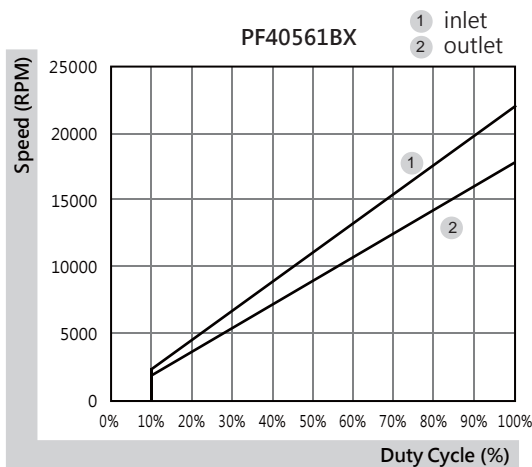
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve



*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

40x40x56 mm

19.7~25.0 CFM



Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed in / out	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(inch-H ₂ O)	(dB(A))	(g)	
VG40561BX-000U-A9H	☉	12	1400	16.80	25500/22300	25.0	6.19	65.0	87.0	1
VG40561B1-000U-A9H	☉	12	750	9.00	20400/17800	19.7	4.16	62.5	87.0	2

Function

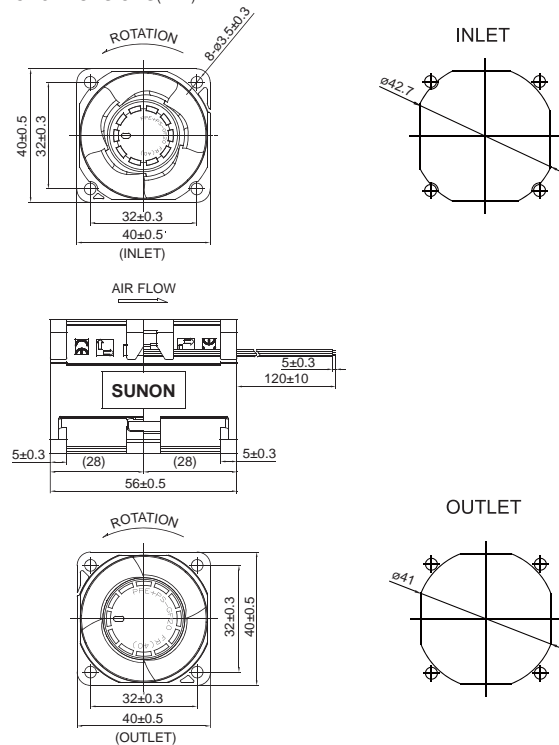
VG40561BX / 1

A9H: AutoRestart

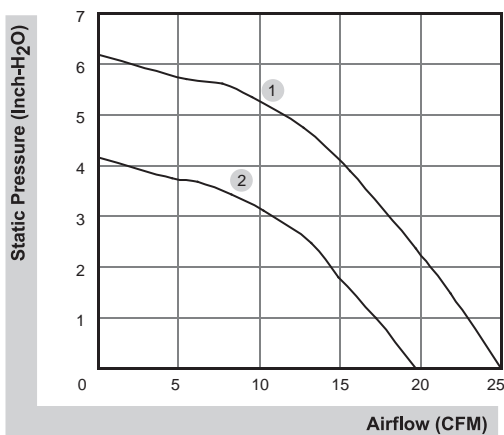
G9H: AutoRestart and F type

S9H: AutoRestart , F type and PWM

External dimensions(mm)



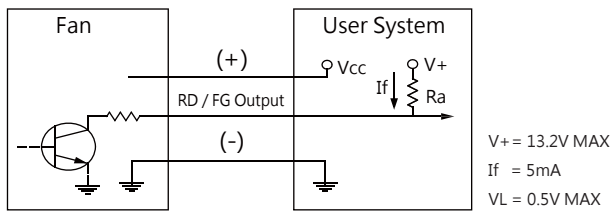
Air Flow-Static Pressure Characteristics



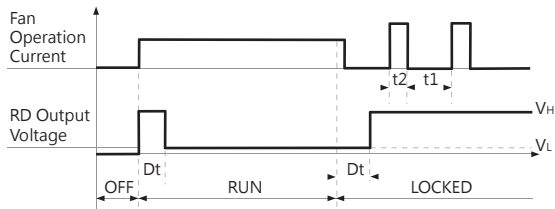
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

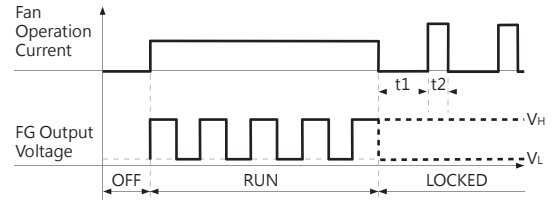
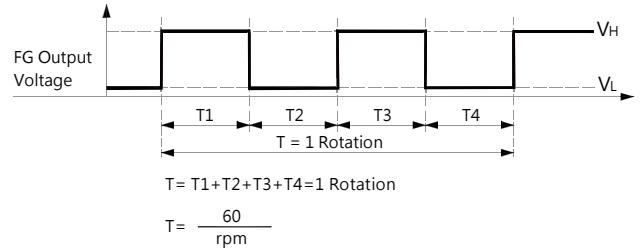
■ FG Signal



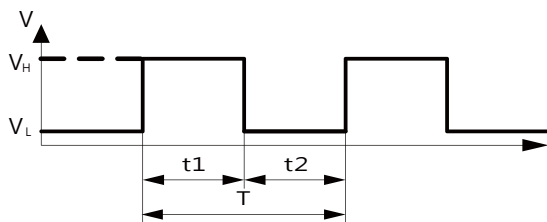
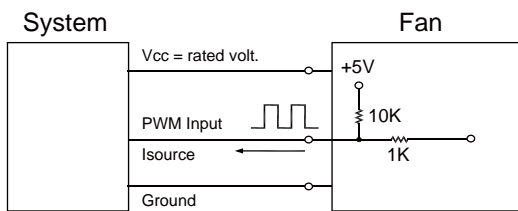
[RD Signal]



[FG Signal]



■ PWM Input Signal



1. Period :
$$T = \frac{1}{f_{\text{PWM}}} = t1 + t2(\text{sec})$$

2. Duty Cycle (D.C.) :
$$\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$$

VH=2.3~5.5V

VL=0~0.8V

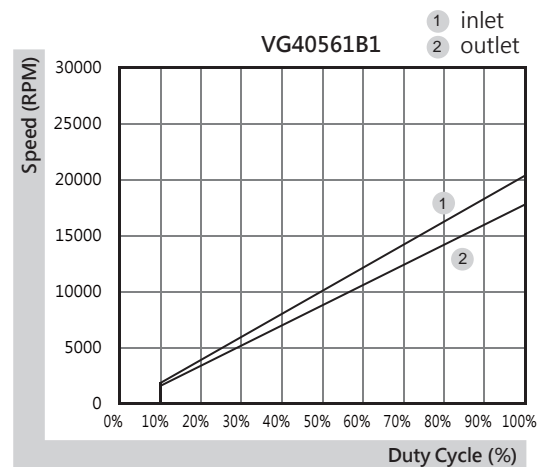
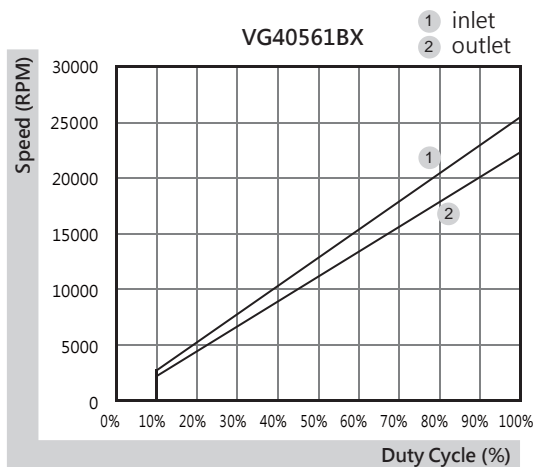
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve



*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

60x60x38 mm

60.6~75.2 CFM



■ Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(Inch-H ₂ O)	(dB(A))	(g)	
PF60381BX-000U-A99	☉	12	2500	30.00	16500	75.2	3.28	67.6	127.0	1
PF60381B1-000U-A99	☉	12	1200	14.40	13200	60.6	2.13	61.2	127.0	2

■ Function

PF60381BX / 1

A99: AutoRestart

F99: AutoRestart and R type

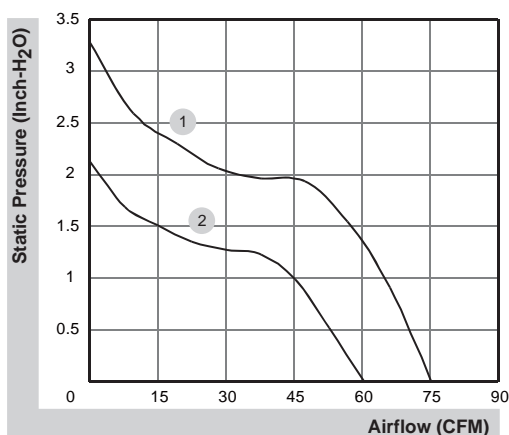
G99: AutoRestart and F type

H99: AutoRestart and PWM

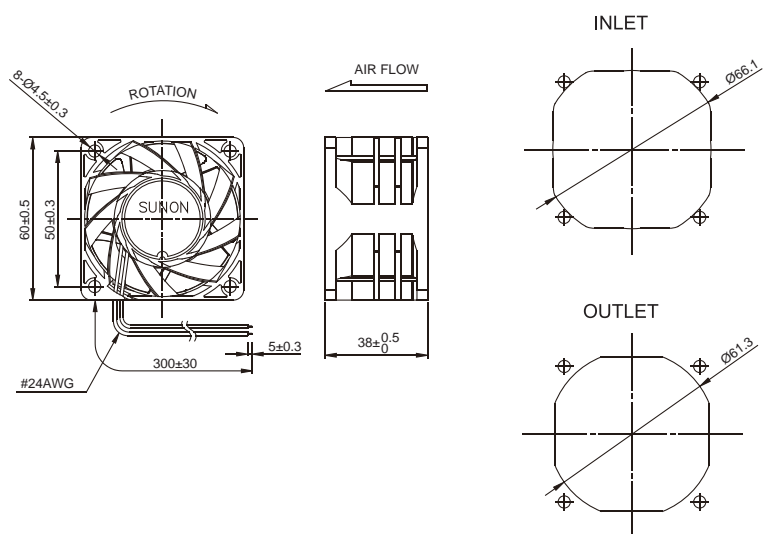
Q99: AutoRestart , R type and PWM

S99: AutoRestart , F type and PWM

■ Air Flow-Static Pressure Characteristics



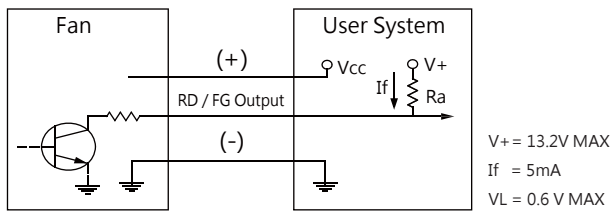
■ External dimensions(mm)



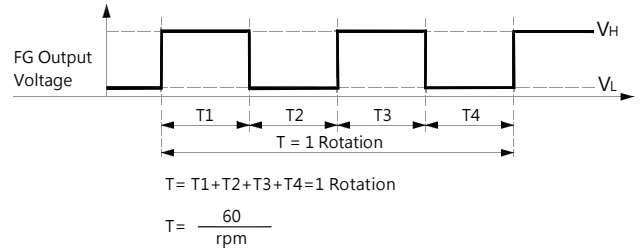
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

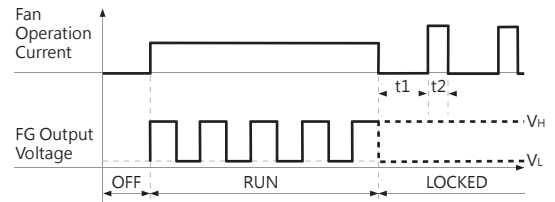
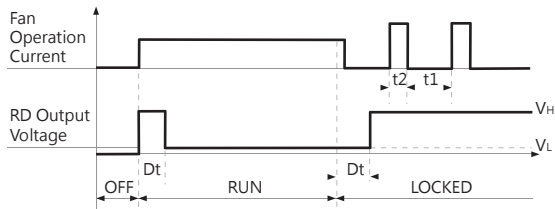
■ FG Signal



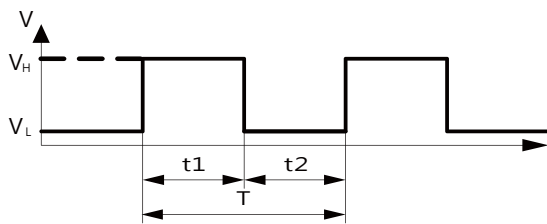
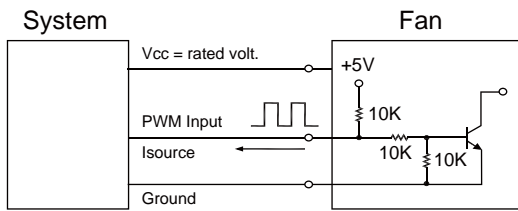
[FG Signal]



[RD Signal]



■ PWM Input Signal



1. Period : $T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$

2. Duty Cycle (D.C.) : $\frac{t1}{t1 + t2} * 100 = \frac{t1}{T} * 100(\%)$

VH=2.3~5.5V

VL=0~0.8V

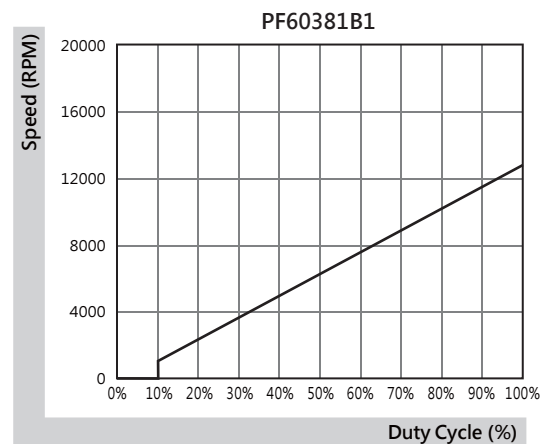
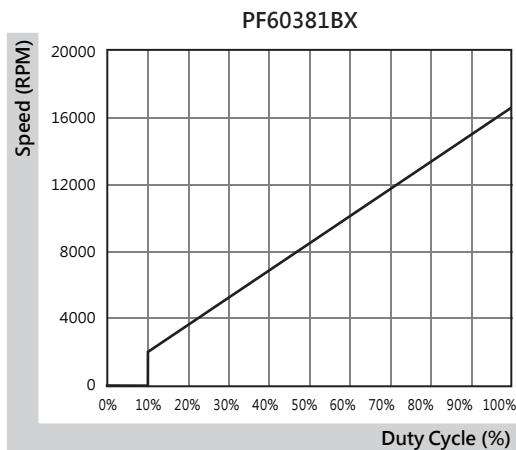
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve



*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

60x60x38 mm

54.1~67.8 CFM



■ Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(inch-H ₂ O)	(dB(A))	(g)	
VF60381BX-000U-A9H	☉	12	1900	22.80	22800	67.8	4.84	64.1	120.0	1
VF60381B1-000U-A9H	☉	12	1000	12.00	18300	54.1	4.23	60.9	120.0	2

■ Function

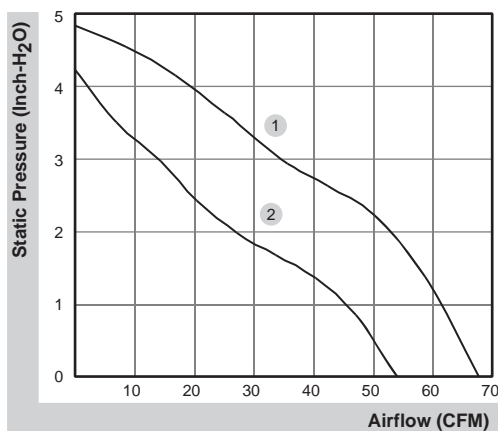
VF60381BX / 1

A9H: AutoRestart

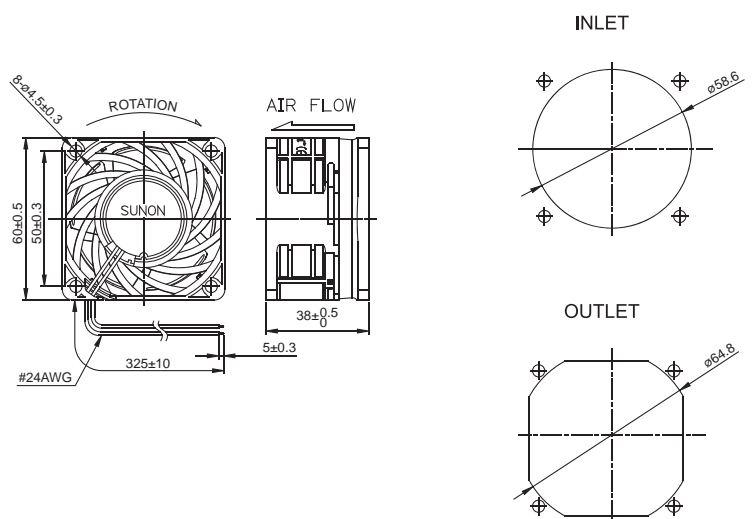
G9H: AutoRestart and F type

S9H: AutoRestart , F type and PWM

■ Air Flow-Static Pressure Characteristics



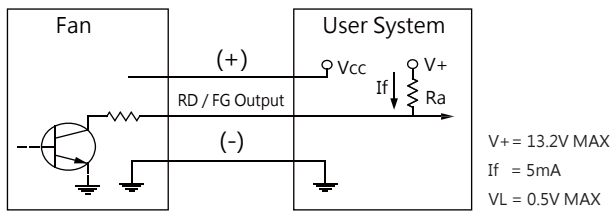
■ External dimensions(mm)



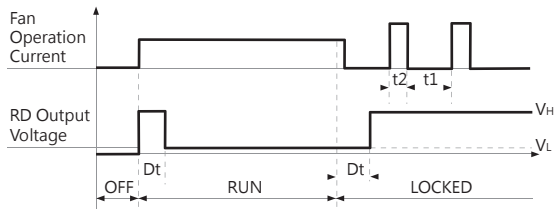
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

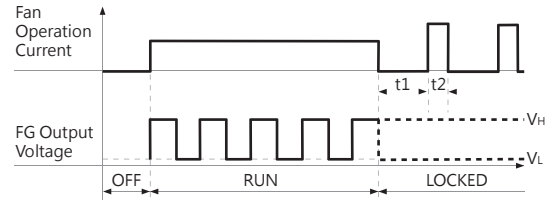
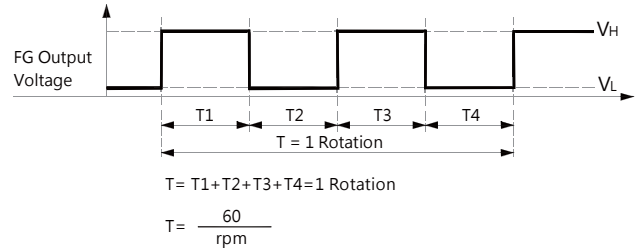
■ RD / FG Signal



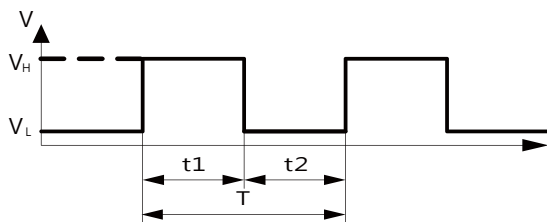
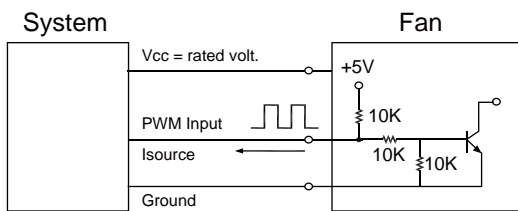
[RD Signal]



[FG Signal]



■ PWM Input Signal



1. Period :
$$T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$$

2. Duty Cycle (D.C.) :
$$\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$$

VH=2.3~5.5V

VL=0~0.8V

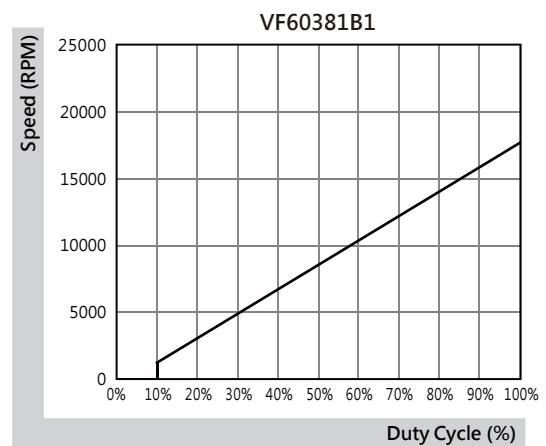
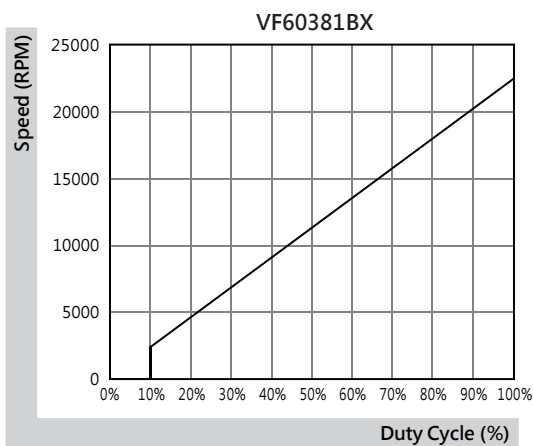
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve

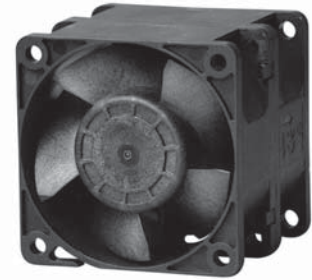


*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

60x60x56 mm

58.5~72.9 CFM



Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed in / out	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(inch-H ₂ O)	(dB(A))	(g)	
PF60561BX-000U-A9H	☉	12	2500	30.00	15300/14300	72.9	3.44	71.7	172.0	1
PF60561B1-000U-A9H	☉	12	1400	16.80	12300/11500	58.5	2.35	67.0	172.0	2

Function

PF60561BX / 1

A9H: AutoRestart

F9H: AutoRestart and R type

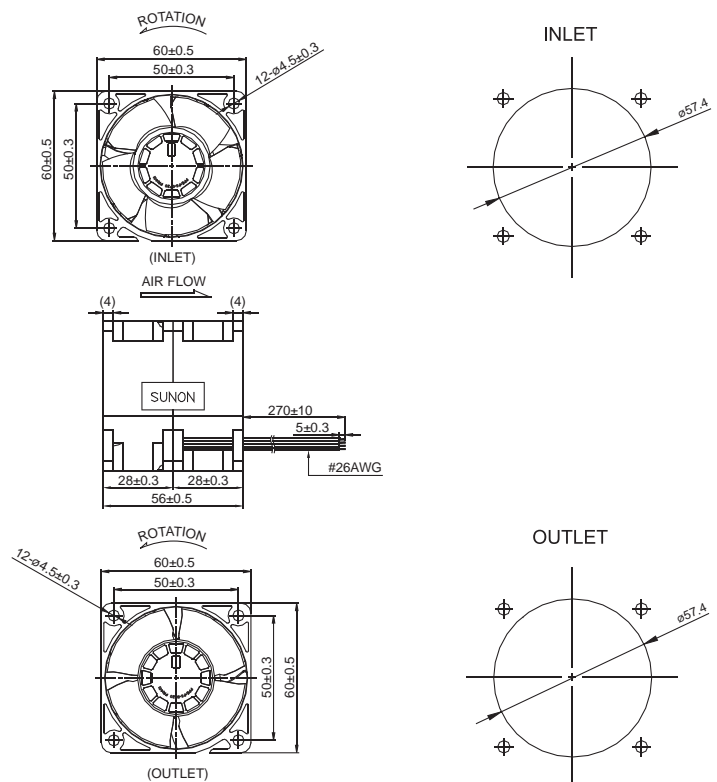
G9H: AutoRestart and F type

H9H: AutoRestart and PWM

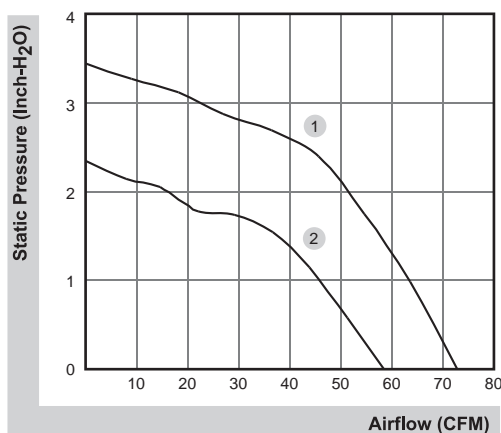
Q9H: AutoRestart , R type and PWM

S9H: AutoRestart , F type and PWM

External dimensions(mm)



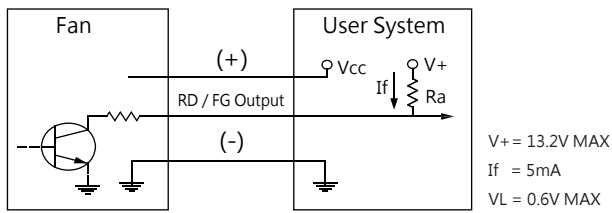
Air Flow-Static Pressure Characteristics



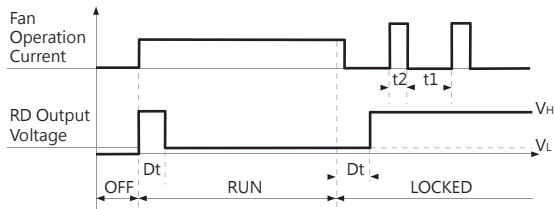
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

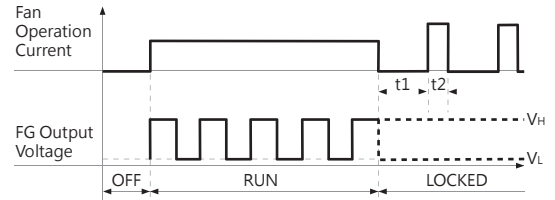
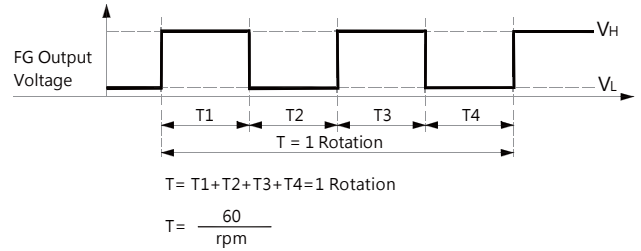
■ RD / FG Signal



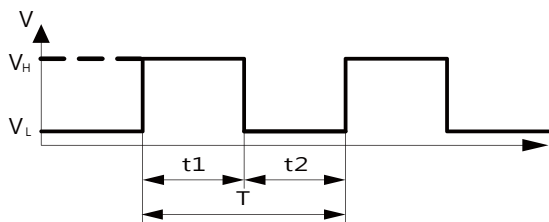
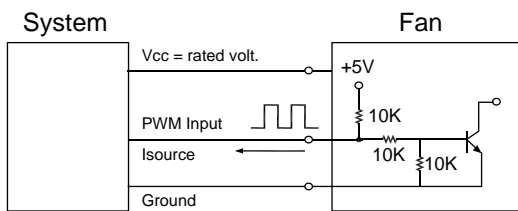
[RD Signal]



[FG Signal]



■ PWM Input Signal



1. Period : $T = \frac{1}{f_{\text{PWM}}} = t_1 + t_2(\text{sec})$

2. Duty Cycle (D.C.) : $\frac{t_1}{t_1 + t_2} * 100 = \frac{t_1}{T} * 100(\%)$

VH=2.3~5.5V

VL=0~0.8V

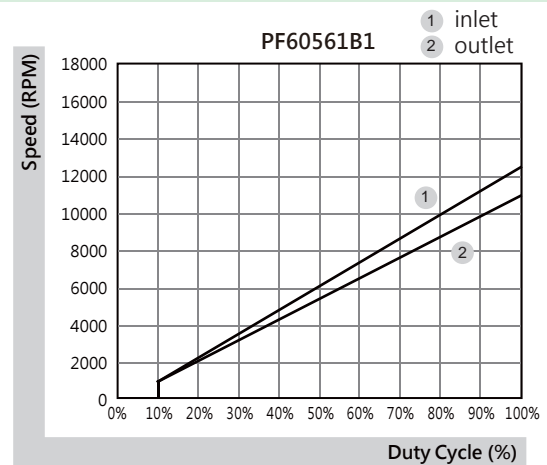
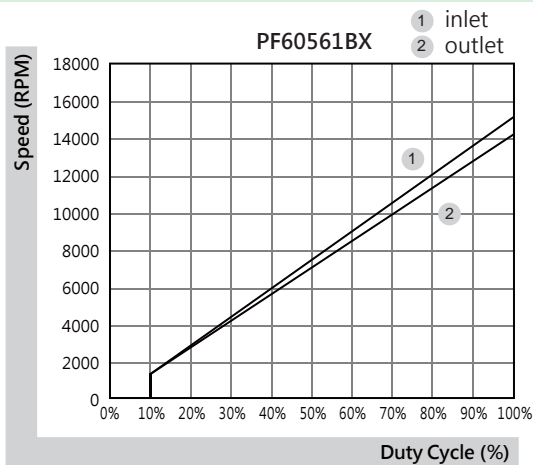
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve



*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

60x60x76 mm

58.7~73.2 CFM



■ Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed in / out	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(inch-H ₂ O)	(dB(A))	(g)	
PF60761BX-000U-A99	☉	12	2800	33.60	18200/14700	73.2	3.96	68.6	270.0	1
PF60761B1-000U-A99	☉	12	1600	19.20	14600/11700	58.7	2.54	62.8	270.0	2

■ Function

PF60761BX / 1

A99: AutoRestart

F99: AutoRestart and R type

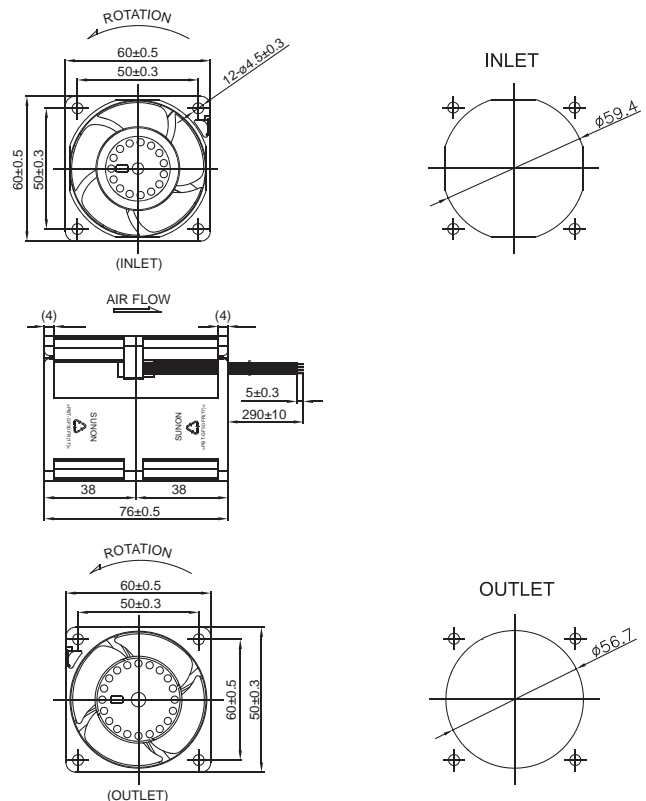
G99: AutoRestart and F type

H99: AutoRestart and PWM

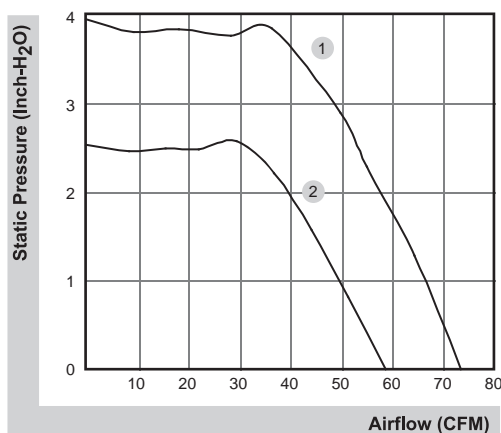
Q99: AutoRestart , R type and PWM

S99: AutoRestart , F type and PWM

■ External dimensions(mm)



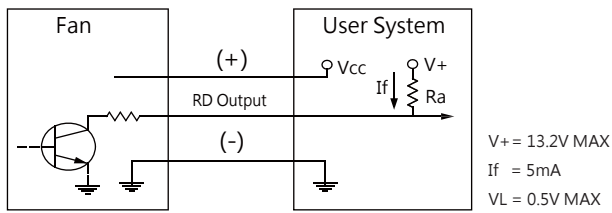
■ Air Flow-Static Pressure Characteristics



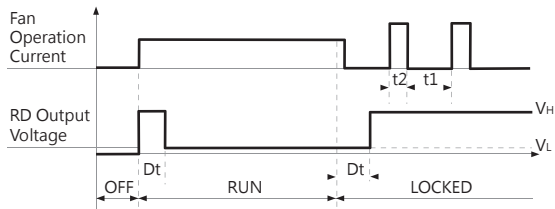
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

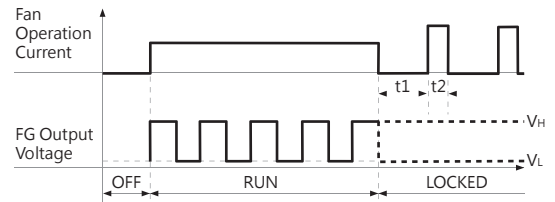
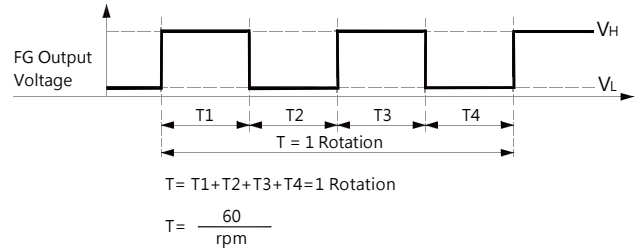
RD / FG Signal



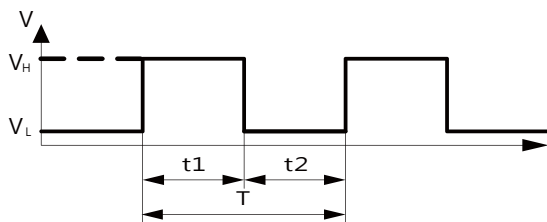
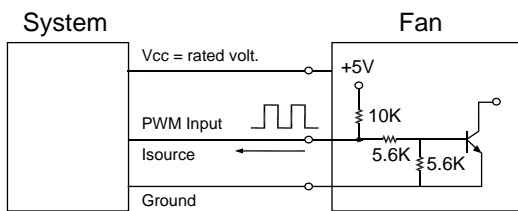
[RD Signal]



[FG Signal]



PWM Input Signal



1. Period :
$$T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$$

2. Duty Cycle (D.C.) :
$$\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$$

VH=2.3~5.5V

VL=0~0.8V

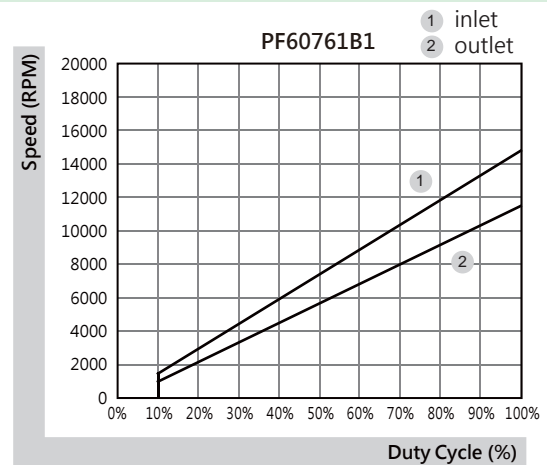
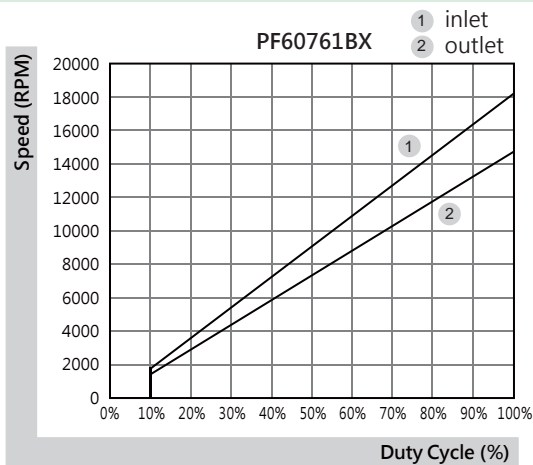
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

PWM Curve

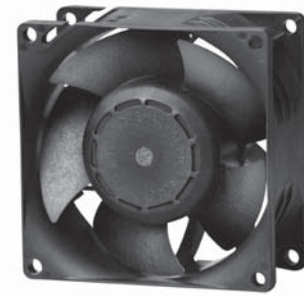


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*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

80x80x38 mm

113.9~141.9 CFM



■ Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(inch-H ₂ O)	(dB(A))	(g)	
PF80381BX-000U-A99	☉	12	4000	48.00	14000	141.9	3.20	72.1	195.0	1
PF80381B1-000U-A99	☉	12	2000	24.00	11200	113.9	2.23	64.8	195.0	2

■ Function

PF80381BX / 1

A99: AutoRestart

F99: AutoRestart and R type

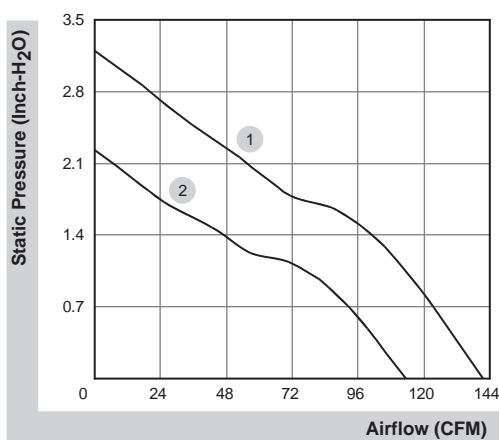
G99: AutoRestart and F type

H99: AutoRestart and PWM

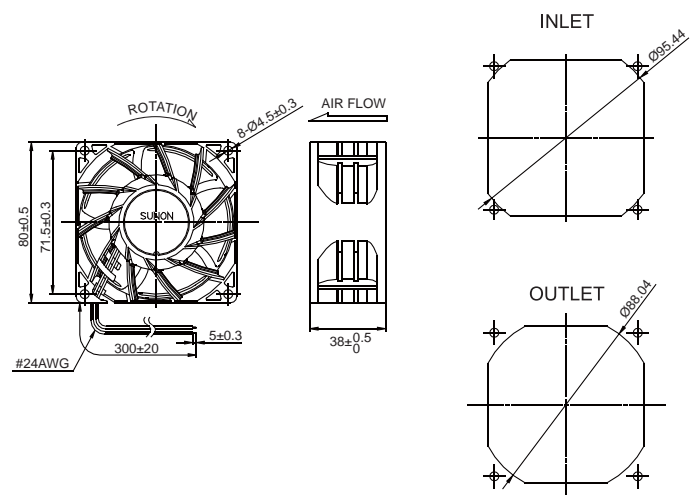
Q99: AutoRestart , R type and PWM

S99: AutoRestart , F type and PWM

■ Air Flow-Static Pressure Characteristics



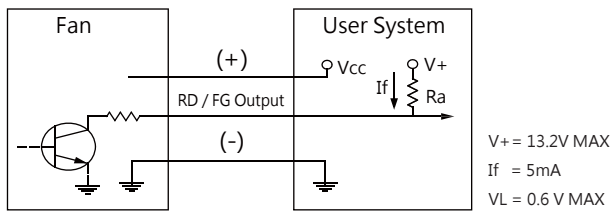
■ External dimensions(mm)



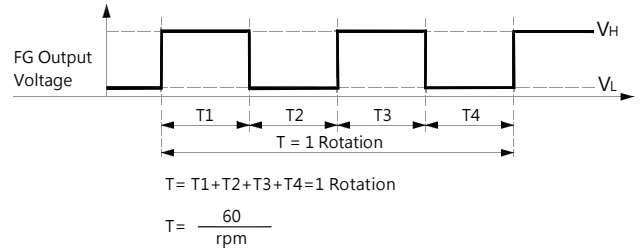
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

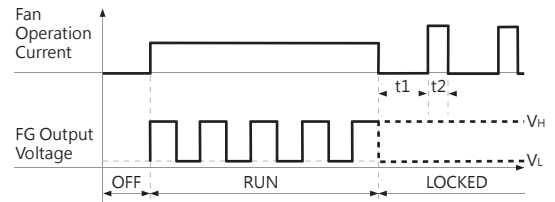
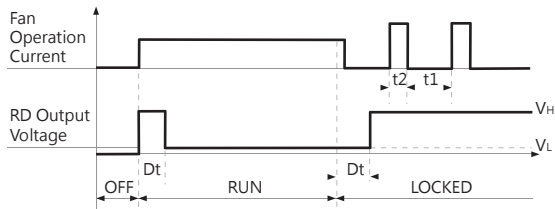
■ FG Signal



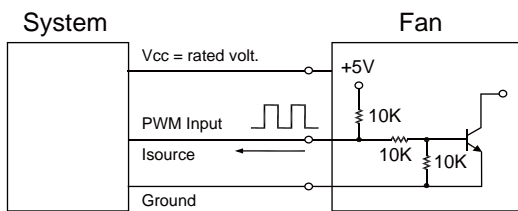
[FG Signal]



[RD Signal]

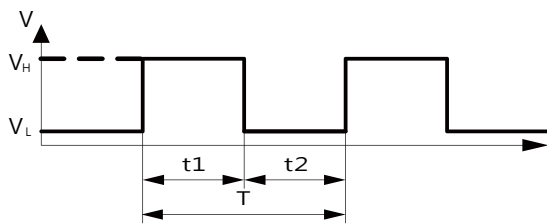


■ PWM Input Signal



1. Period :
$$T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$$

2. Duty Cycle (D.C.) :
$$\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$$



VH=2.3~5.5V

VL=0~0.8V

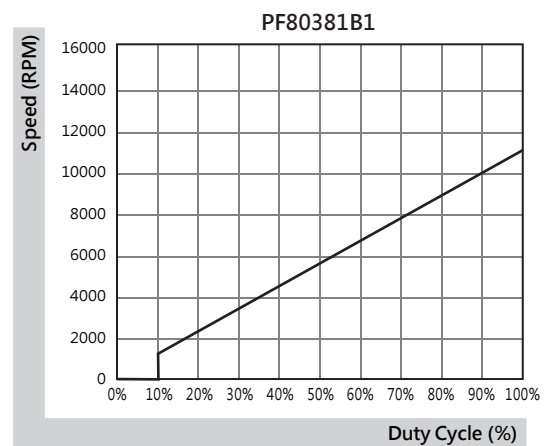
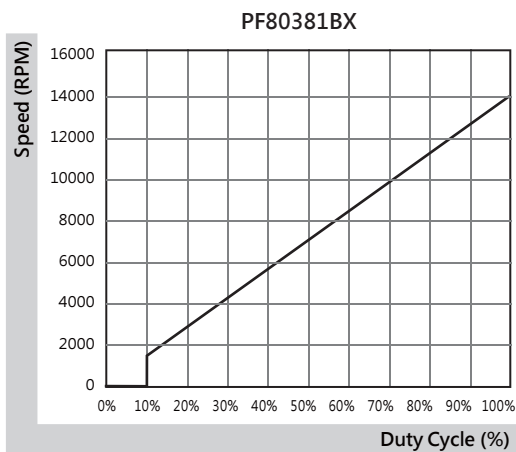
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve

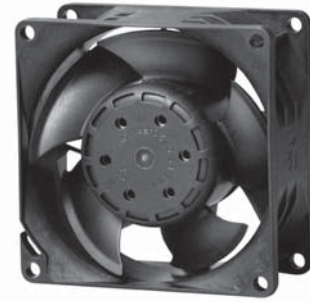


*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

80x80x38 mm

105.8~134.3 CFM



Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(inch-H ₂ O)	(dB(A))	(g)	
PF80384BX-000U-A99	☉	48	700	33.60	12900	134.3	3.35	67.5	204.0	1
PF80384B1-000U-A99	☉	48	380	18.24	10500	105.8	2.46	62.6	204.0	2

Function

PF80384BX / 1

A99: AutoRestart

F99: AutoRestart and R type

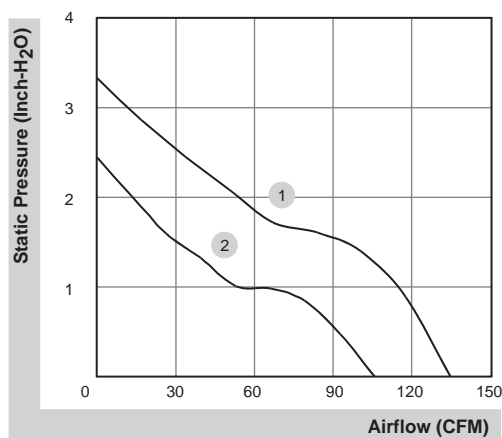
G99: AutoRestart and F type

H99: AutoRestart and PWM

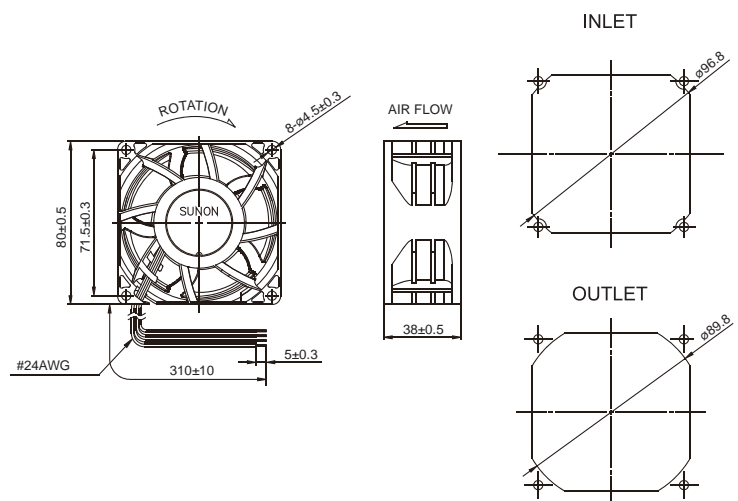
Q99: AutoRestart , R type and PWM

S99: AutoRestart , F type and PWM

Air Flow-Static Pressure Characteristics



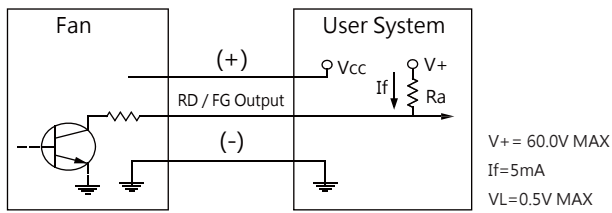
External dimensions(mm)



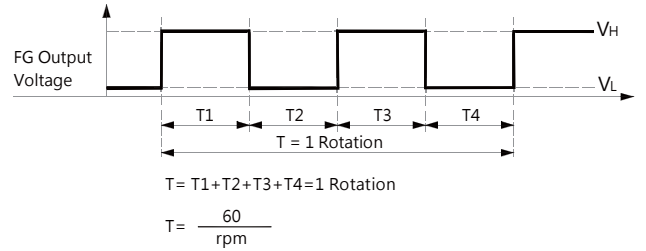
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

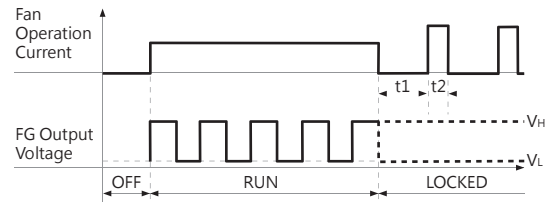
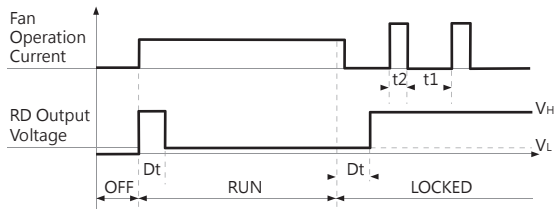
■ FG Signal



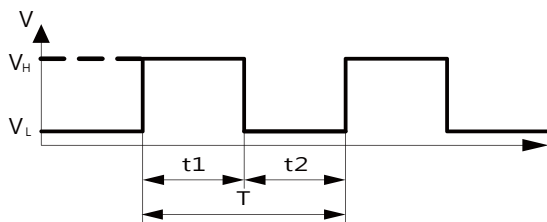
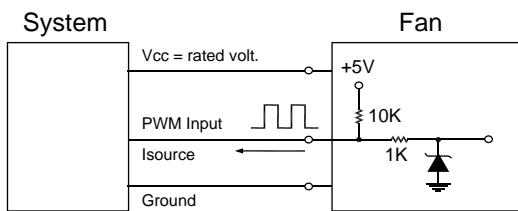
[FG Signal]



[RD Signal]



■ PWM Input Signal



1. Period : $T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$

2. Duty Cycle (D.C.) : $\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$

VH=2.8~5.5V

VL=0~0.8V

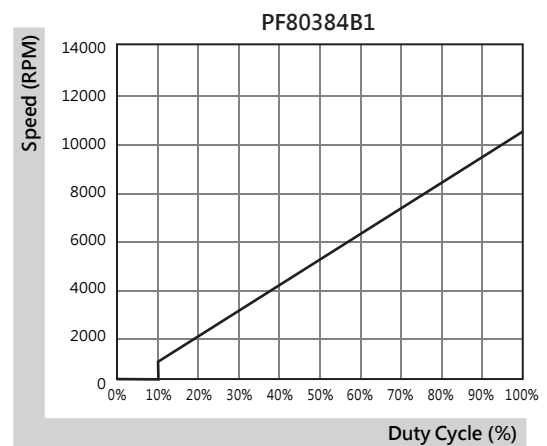
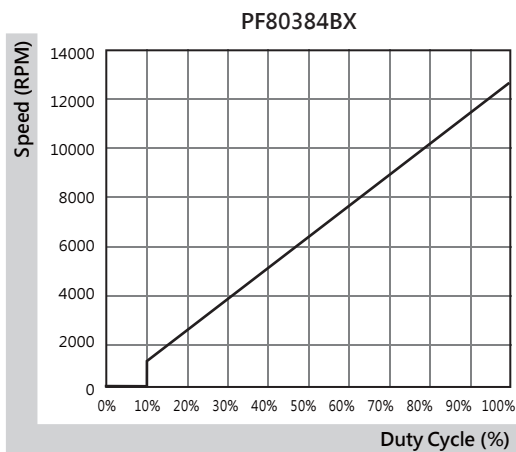
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve



*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

80x80x80 mm

122.0~151.5 CFM



Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed in / out	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(Inch-H ₂ O)	(dB(A))	(g)	
PF80801BX-000U-A9H	☉	12	6800	81.60	15600/14100	151.5	5.44	80.4	464.0	1
PF80801B1-000U-A9H	☉	12	3500	42.00	12600/11300	122.0	3.66	75.1	464.0	2

Function

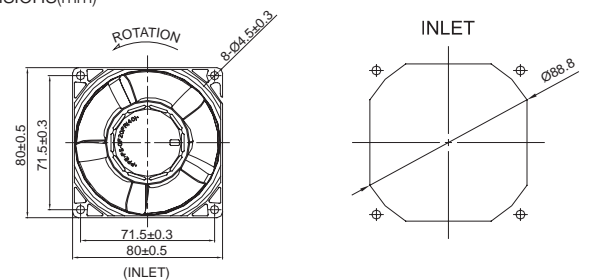
PF80801BX / 1

A9H: AutoRestart

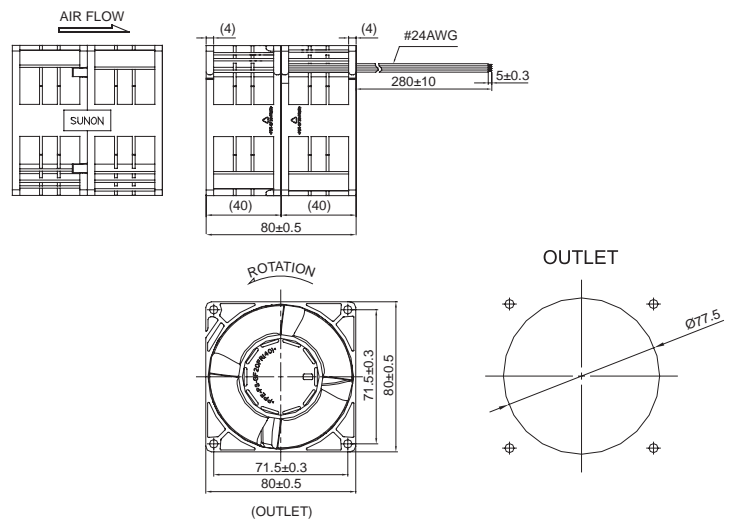
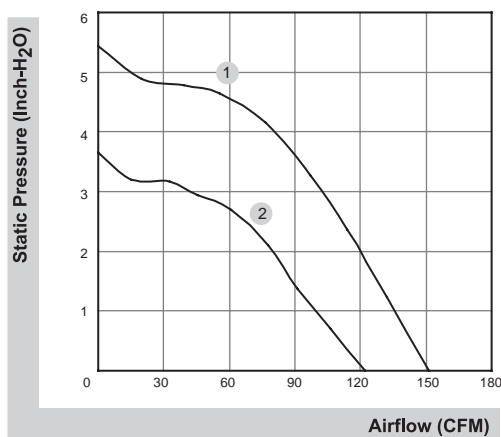
G9H: AutoRestart and F type

S9H: AutoRestart , F type and PWM

External dimensions(mm)



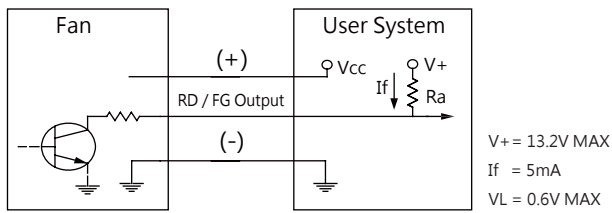
Air Flow-Static Pressure Characteristics



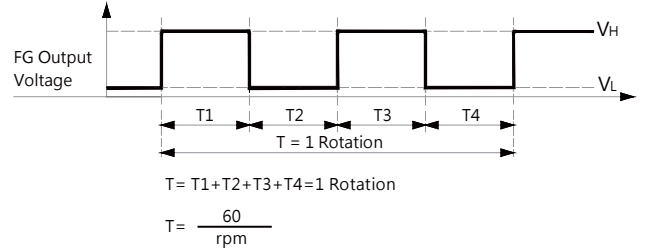
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

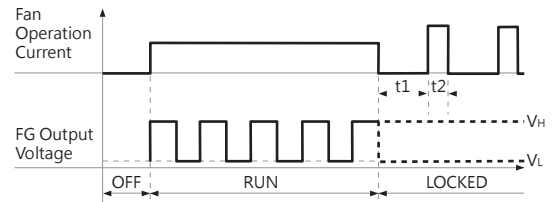
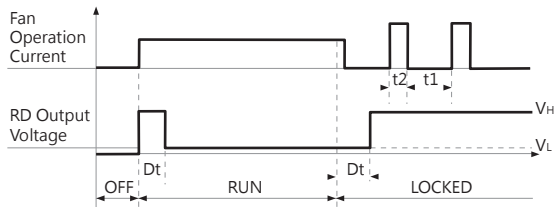
■ FG Signal



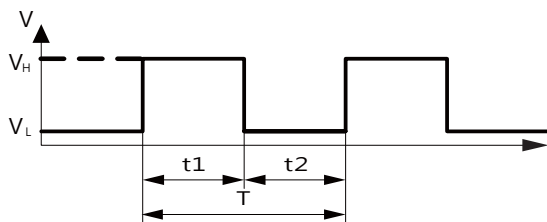
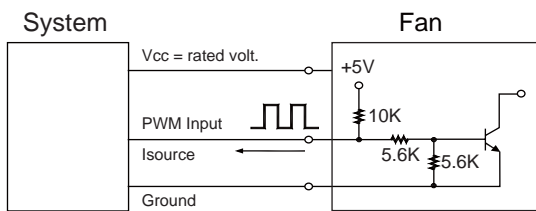
[FG Signal]



[RD Signal]



■ PWM Input Signal



1. Period : $T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$

2. Duty Cycle (D.C.) : $\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$

VH=2.3~5.5V

VL=0~0.8V

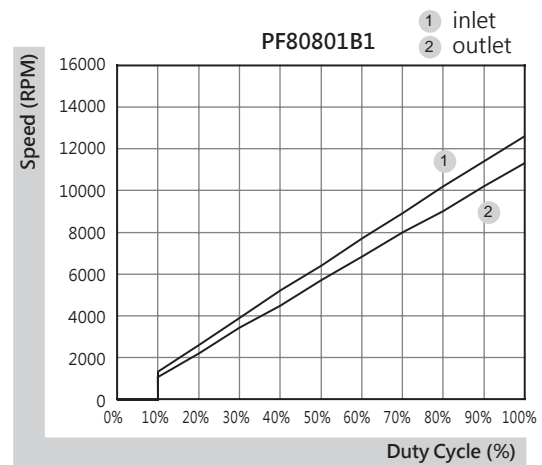
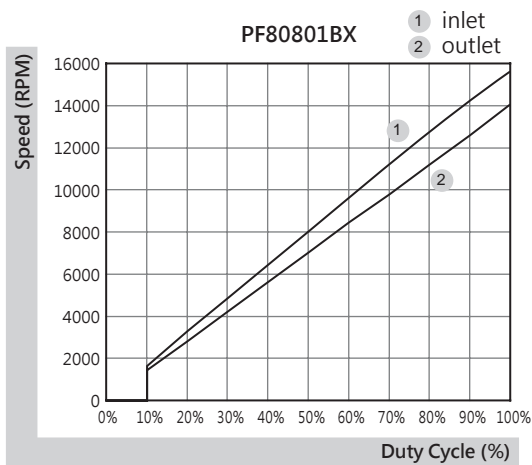
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve

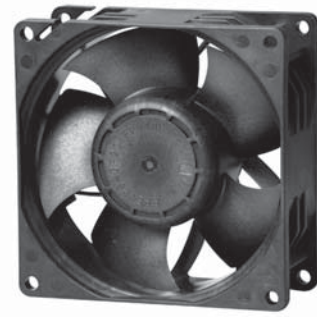


*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

92x92x38 mm

138.1~182.4 CFM



■ Specifications

Model	Bearing	Rating Voltage (VDC)	Power Current (mA)	Power Consumption (WATTS)	Speed (RPM)	Air Flow (CFM)	Static Pressure (Inch-H ₂ O)	Noise (dB(A))	Weight (g)	Curve
PF92381BX-000U-A99	2BALL Sleeve	12	4000	48.00	13000	182.4	2.94	72.1	210.0	1
PF92381B1-000U-A99	2BALL Sleeve	12	1700	20.40	9800	138.1	1.95	63.7	210.0	2

■ Function

PF92381BX / 1

A99: AutoRestart

F99: AutoRestart and R type

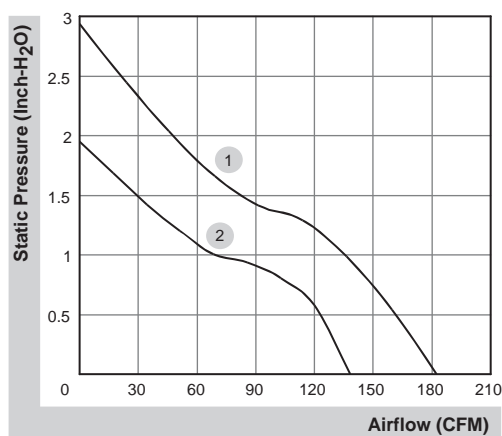
G99: AutoRestart and F type

H99: AutoRestart and PWM

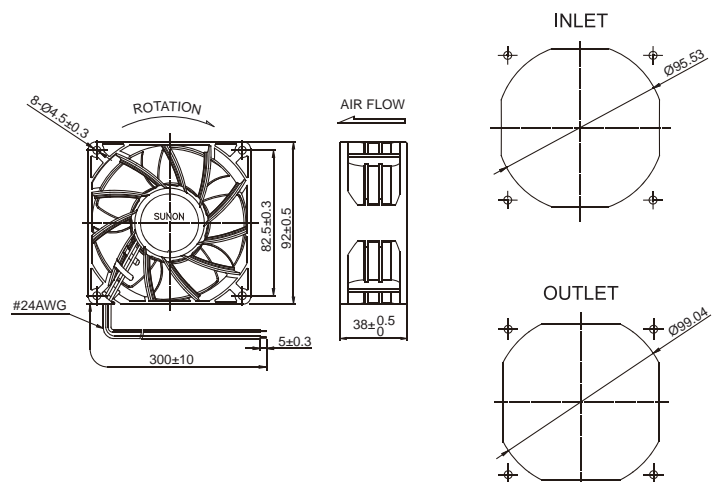
Q99: AutoRestart , R type and PWM

S99: AutoRestart , F type and PWM

■ Air Flow-Static Pressure Characteristics



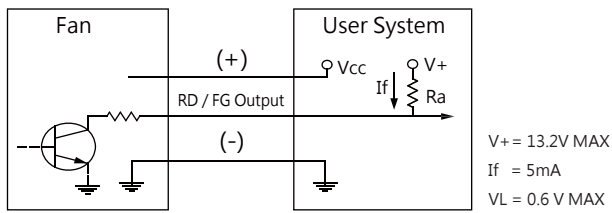
■ External dimensions(mm)



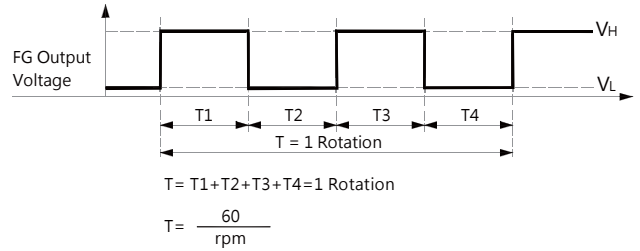
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

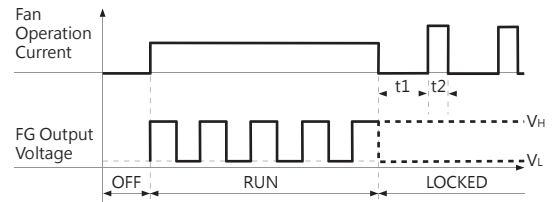
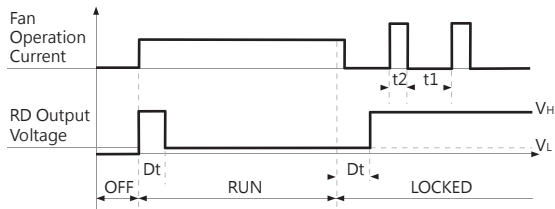
■ FG Signal



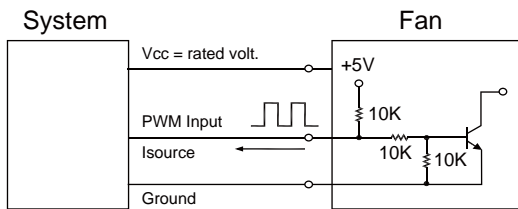
[FG Signal]



[RD Signal]

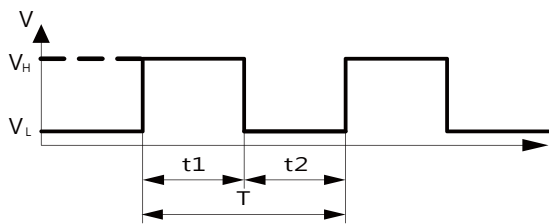


■ PWM Input Signal



1. Period :
$$T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$$

2. Duty Cycle (D.C.) :
$$\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$$



VH=2.3~5.5V

VL=0~0.8V

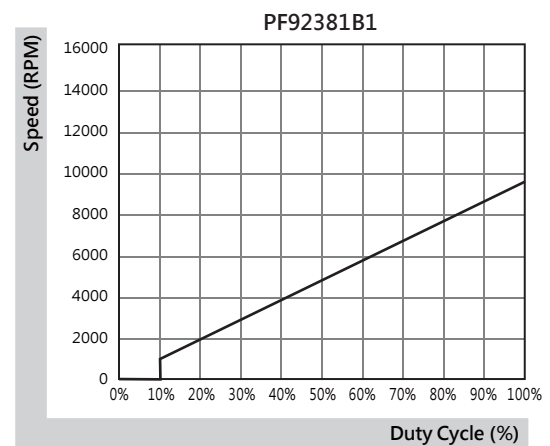
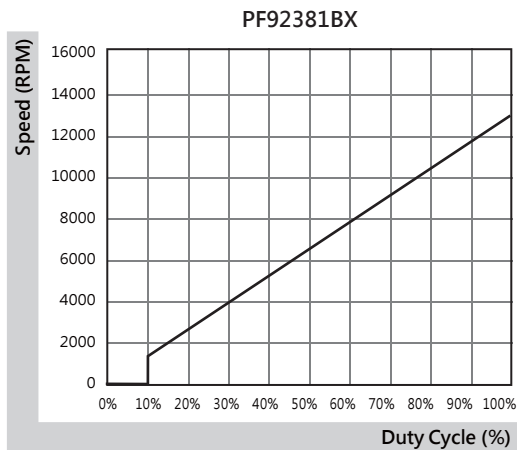
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve



*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

140x140x38 mm

238.5~297.9 CFM



■ Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(Inch-H ₂ O)	(dB(A))	(g)	
PFE0381BX-000U-A99	☉	12	3300	39.60	6800	297.9	2.05	68.3	472.0	1
PFE0381B1-000U-A99	☉	12	1720	20.64	5500	238.5	1.20	62.0	472.0	2

■ Function

PFE0381BX / 1

A99: AutoRestart

F99: AutoRestart and R type

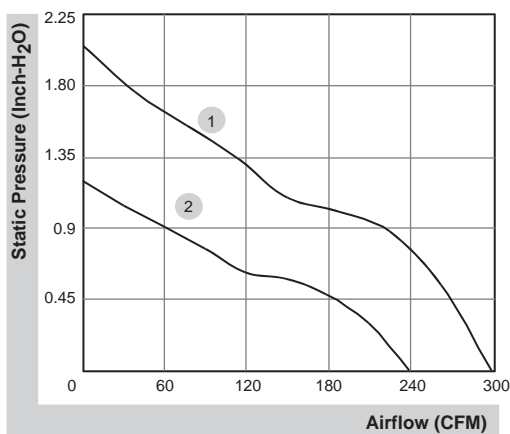
G99: AutoRestart and F type

H99: AutoRestart and PWM

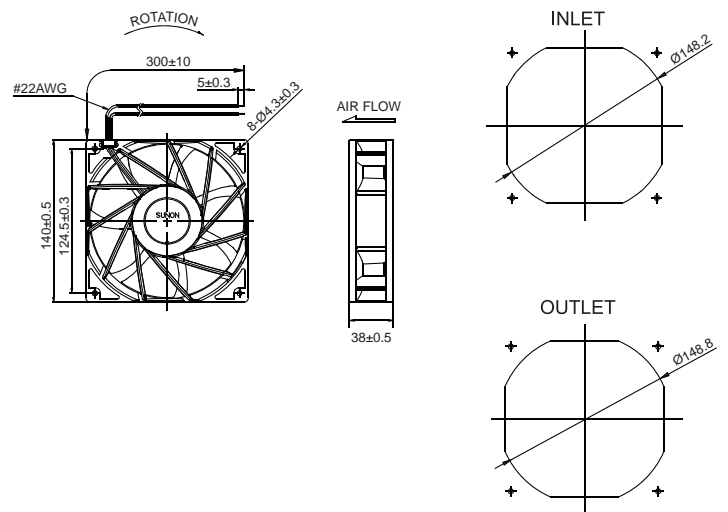
Q99: AutoRestart , R type and PWM

S99: AutoRestart , F type and PWM

■ Air Flow-Static Pressure Characteristics



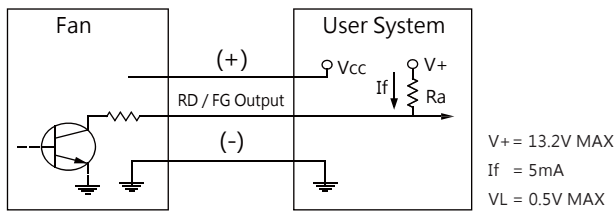
■ External dimensions(mm)



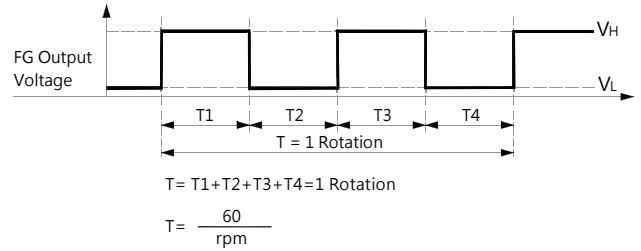
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

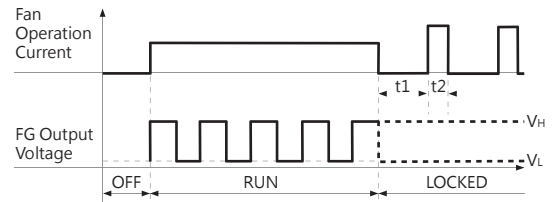
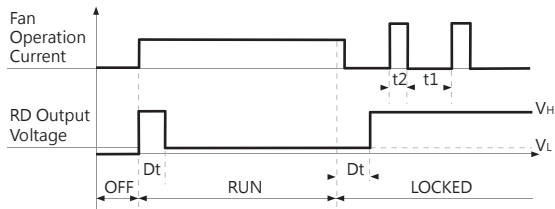
■ FG Signal



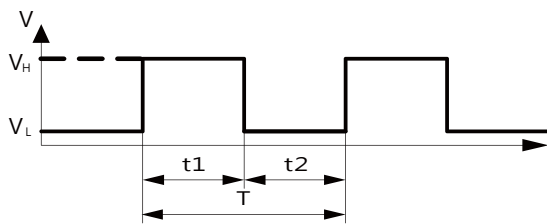
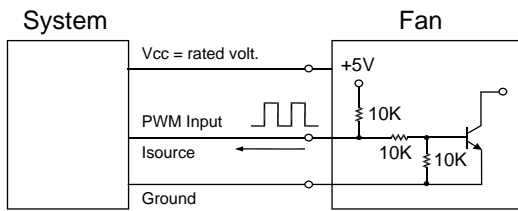
[FG Signal]



[RD Signal]



■ PWM Input Signal



1. Period : $T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$

2. Duty Cycle (D.C.) : $\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$

VH=2.3~5.5V

VL=0~0.8V

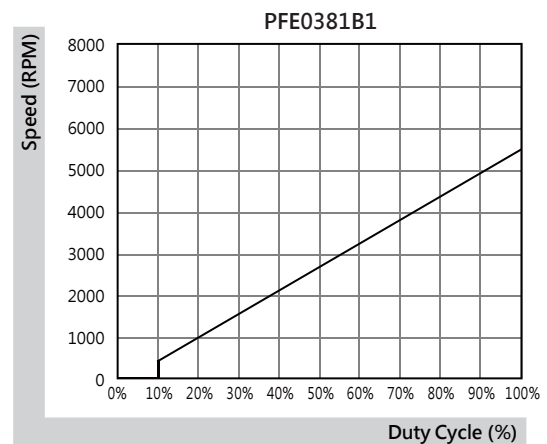
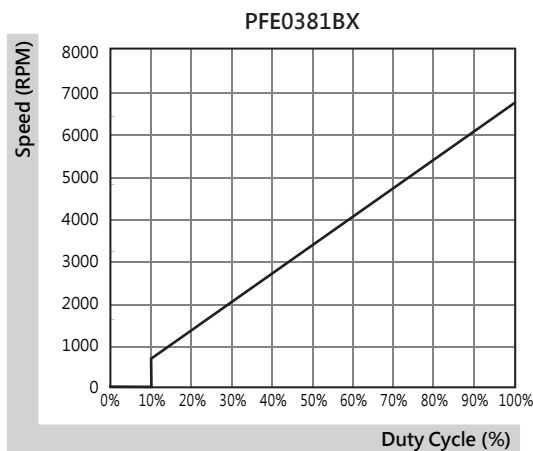
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve



*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

140x140x38 mm

282.6 CFM



■ Specifications

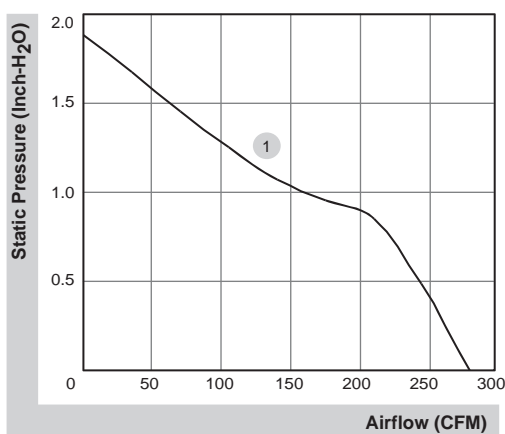
Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(inch-H ₂ O)	(dB(A))	(g)	
PFE0384BX-000U-A99	☉	48	740	35.52	6600	282.6	1.88	65.9	560.0	1

■ Function

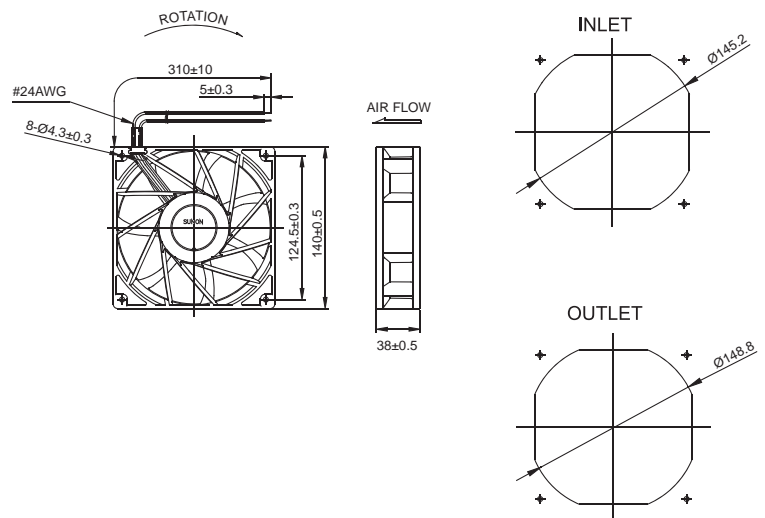
PFE0384BX

- A99: AutoRestart
- F99: AutoRestart and R type
- G99: AutoRestart and F type
- H99: AutoRestart and PWM
- Q99: AutoRestart , R type and PWM
- S99: AutoRestart , F type and PWM

■ Air Flow-Static Pressure Characteristics



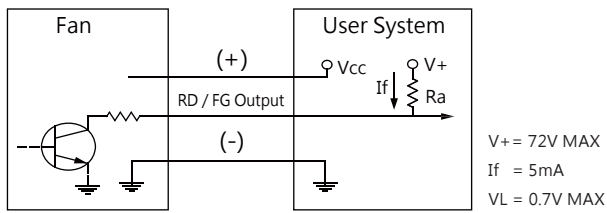
■ External dimensions(mm)



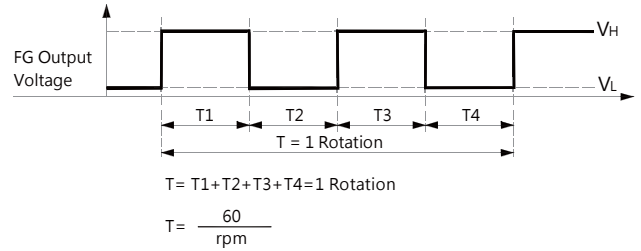
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

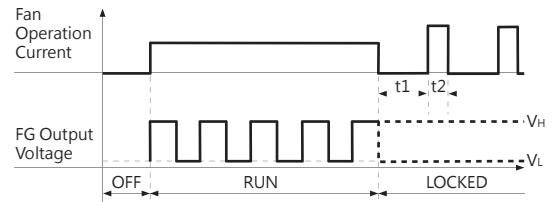
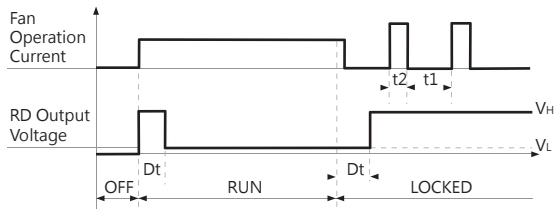
■ FG Signal



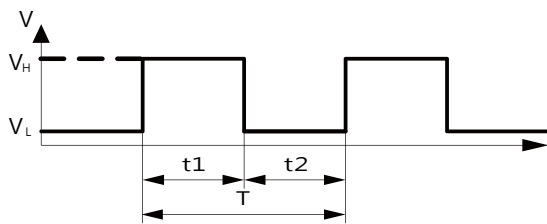
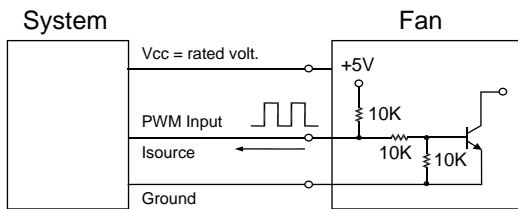
[FG Signal]



[RD Signal]



■ PWM Input Signal



1. Period : $T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$

2. Duty Cycle (D.C.) : $\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$

VH=2.3~5.5V

VL=0~0.8V

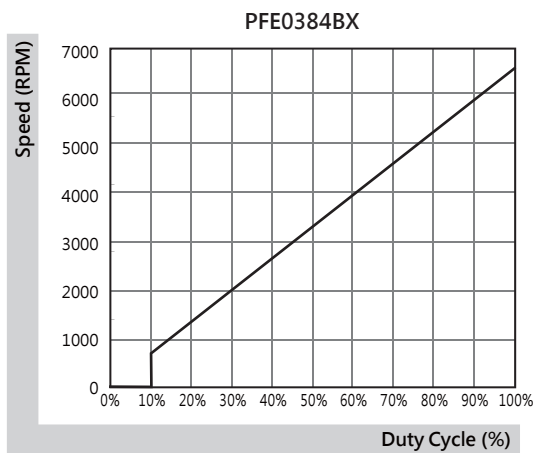
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve



*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

140x140x51 mm

250.3 CFM



■ Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(inch-H ₂ O)	(dB(A))	(g)	
PFE0514B1-000U-A99	☉	48	470	22.56	5000	250.3	1.43	61.4	635.0	1

■ Function

PFE0514B1

A99: AutoRestart

F99: AutoRestart and R type

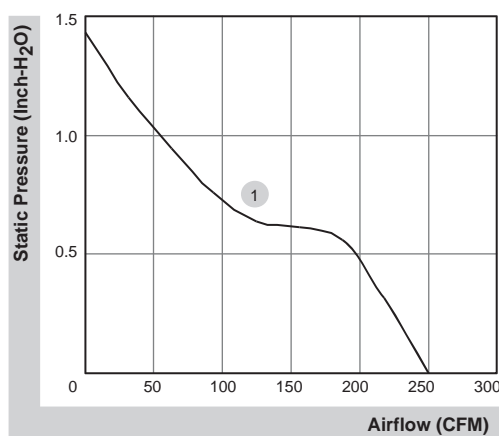
G99: AutoRestart and F type

H99: AutoRestart and PWM

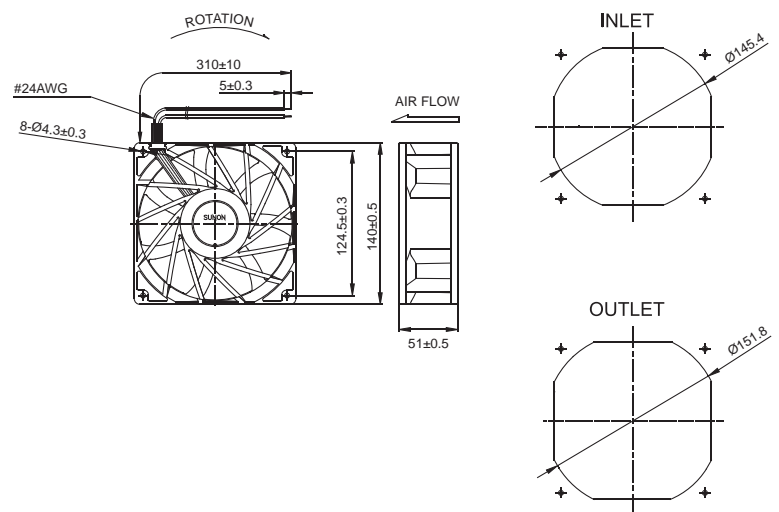
Q99: AutoRestart , R type and PWM

S99: AutoRestart , F type and PWM

■ Air Flow-Static Pressure Characteristics



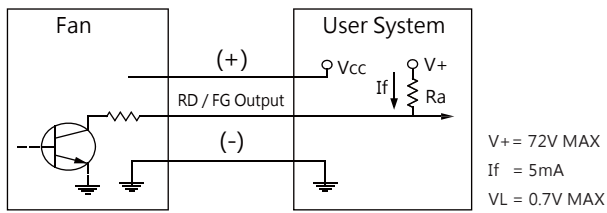
■ External dimensions(mm)



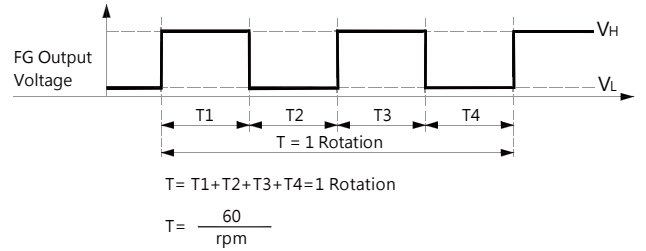
*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

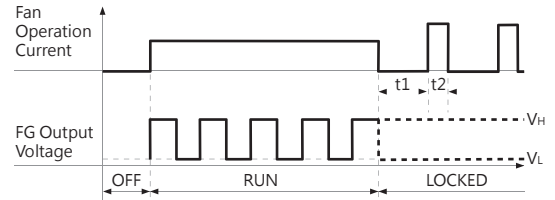
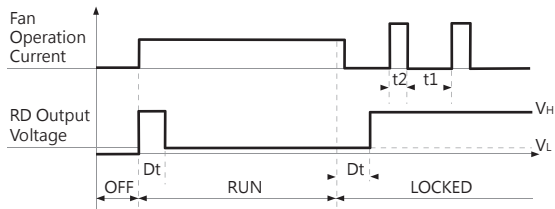
■ FG Signal



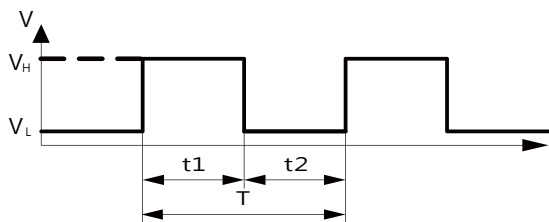
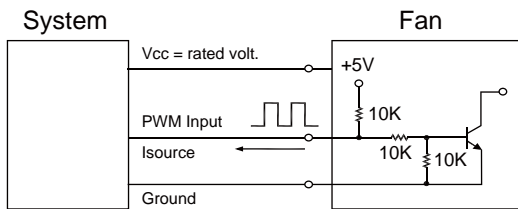
[FG Signal]



[RD Signal]



■ PWM Input Signal



1. Period : $T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$

2. Duty Cycle (D.C.) : $\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$

VH=2.3~5.5V

VL=0~0.8V

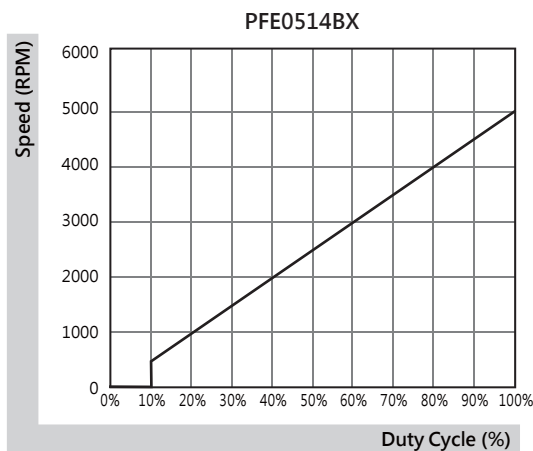
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve



*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

97x95x33 mm

44.2~54.7 CFM



■ Specifications

Model	Bearing	Rating Voltage	Power Current	Power Consumption	Speed	Air Flow	Static Pressure	Noise	Weight	Curve
	2BALL Sleeve	(VDC)	(mA)	(WATTS)	(RPM)	(CFM)	(Inch-H ₂ O)	(dB(A))	(g)	
PF97331BX-B00U-A99	☉	12	3500	42.00	6800	54.7	5.22	63.2	184.0	1
PF97331B1-B00U-A99	☉	12	1600	19.20	5400	44.2	3.39	58.0	184.0	2

■ Function

PF97331BX / 1

A99: AutoRestart

F99: AutoRestart and R type

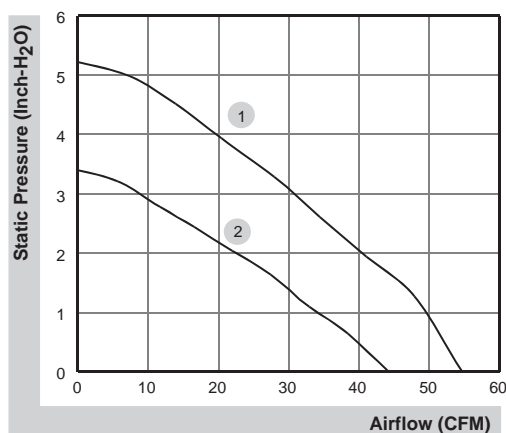
G99: AutoRestart and F type

H99: AutoRestart and PWM

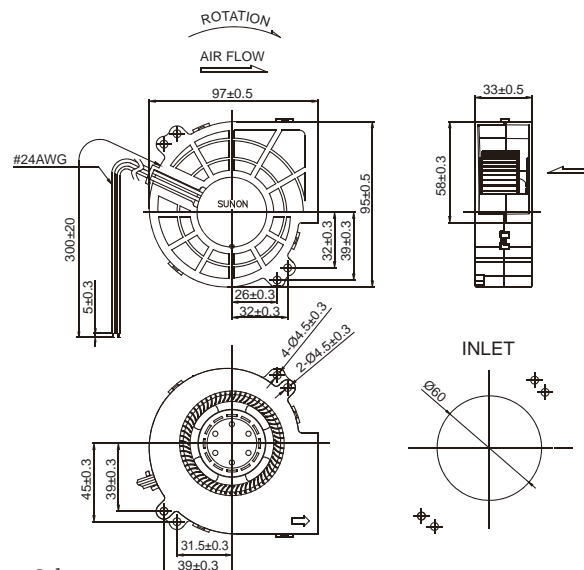
Q99: AutoRestart , R type and PWM

S99: AutoRestart , F type and PWM

■ Air Flow-Static Pressure Characteristics



■ External dimensions(mm)

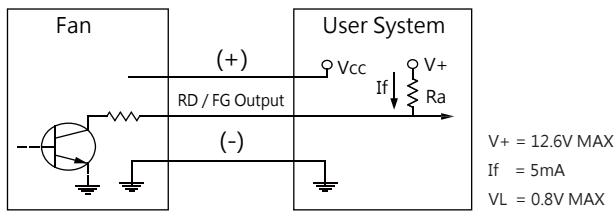


*All model could be customized. Please contact with Sunon Sales.

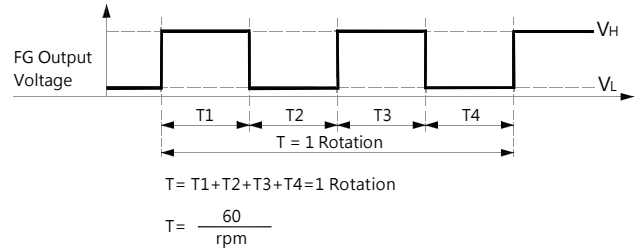
*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

2013/09/30 (198-A)

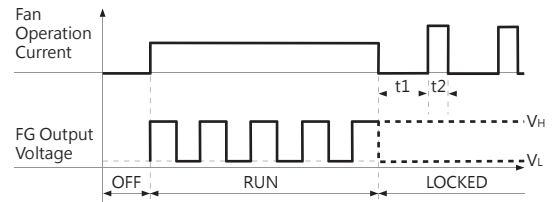
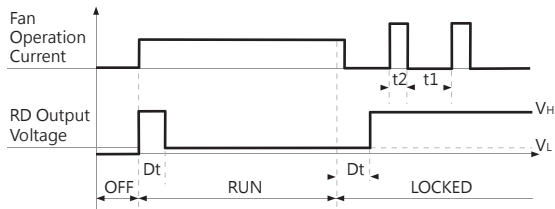
■ FG Signal



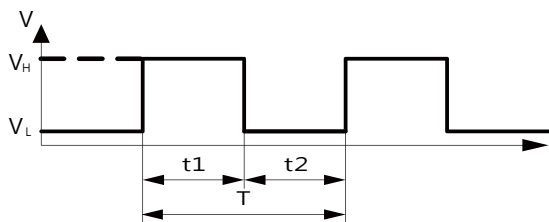
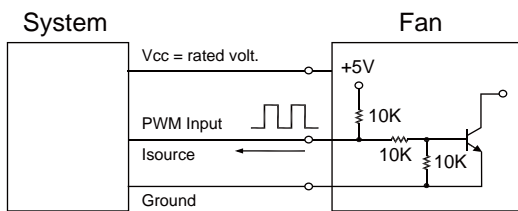
[FG Signal]



[RD Signal]



■ PWM Input Signal



1. Period : $T = \frac{1}{f_{PWM}} = t1 + t2(\text{sec})$

2. Duty Cycle (D.C.) : $\frac{t1}{t1+t2} * 100 = \frac{t1}{T} * 100(\%)$

VH=2.3~5.5V

VL=0~0.8V

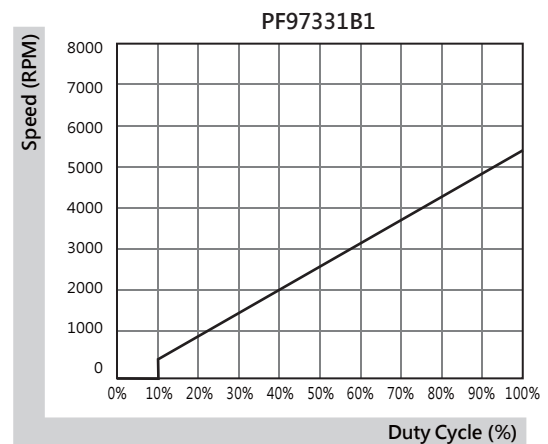
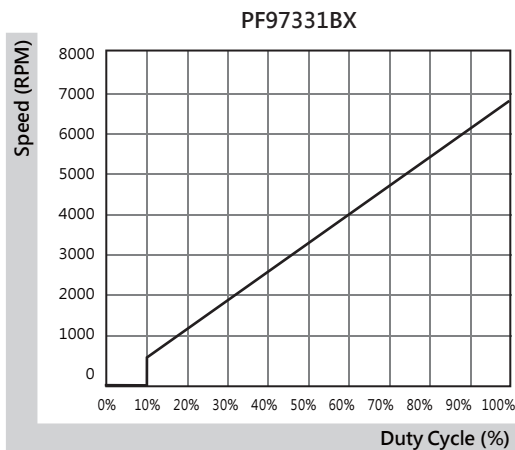
PWM FREQUENCY: 25KHZ

Isource=0.5mA at PWM Input Voltage 0V

The speed is default to be maximum if PWM input pin is unconnected.

Min. start up duty cycle is 10%.

■ PWM Curve



*All model could be customized. Please contact with Sunon Sales.

*Specifications are subject to change without notice. Please Visit SUNON website at www.sunon.com for update information.

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Sunon Taipei Office (Taipei)

TEL : +886-2-27992383

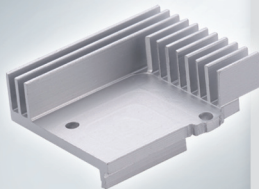
Thermal Module

*All products are RoHS compliant.

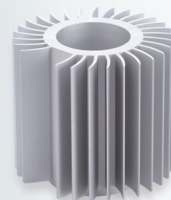
Server
Thermal Module



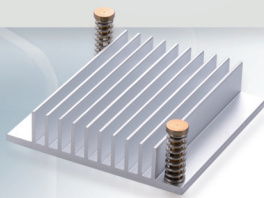
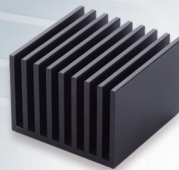
Projector
Thermal Module



LED Lighting
Thermal Module



Set Top Box
Thermal Module



Set Top Box Thermal Module

SA000-11002



■ Specifications

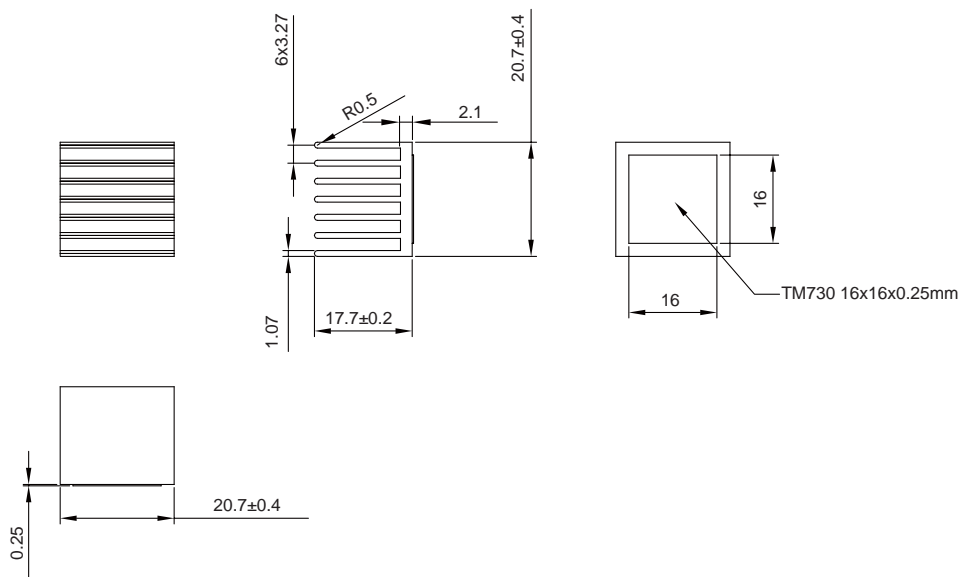
Thermal Module Dimension	L20.7xW20.7xH17.7 mm
Sink Material	AL6063-T5
Thermal Resistance	14°C/W
Mass	9 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。
 *該數據是將散熱模組放置於10x10 mm² 面積的熱源上，在開放式無風流干擾環境中於散熱模組底部正中央量測的溫度。

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with 10*10 mm² heat source.

■ External dimensions(mm)



NOTES:

- All Rights reserved
- RoHS compliant

*此產品目錄之規格僅供參考，如有變更無法預先通知，請以業務提供的產品規格書為準。

*更多Sunon 產品資訊請至SUNON網站www.sunon.com瀏覽。

*Specifications are subject to change without notice. Specifications in this catalog are for reference.

*More Sunon products information please visit SUNON website at www.sunon.com.

Set Top Box Thermal Module

SA000-11003



■ Specifications

Thermal Module Dimension	L27.0xW27.0xH18.0 mm
Sink Material	AL6063-T5
Thermal Resistance	12°C/W
Mass	9.6 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。
 *該數據是將散熱模組放置於10x10 mm² 面積的熱源上，在開放式無風流干擾環境中於散熱模組底部正中央量測的溫度。

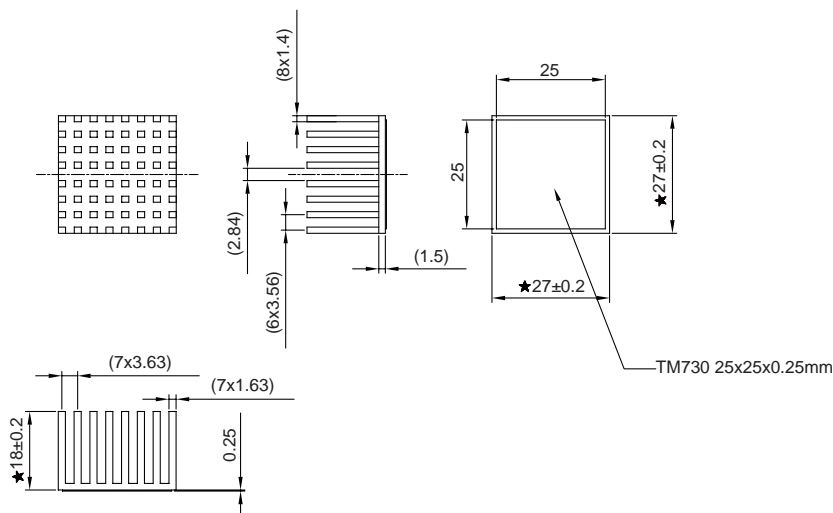
*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with 10*10 mm² heat source.

■ External dimensions(mm)

NOTES:

- All Rights reserved
- RoHS compliant



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*More Sunon products information please visit SUNON website at www.sunon.com.

Set Top Box Thermal Module

SA000-12009



■ Specifications

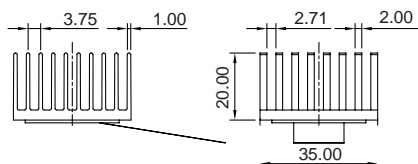
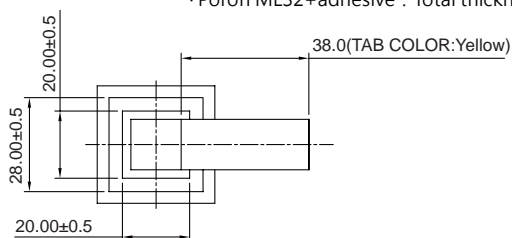
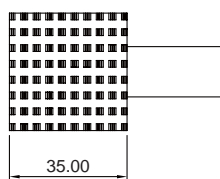
Thermal Module Dimension	L35.0xW35.0xH20.0 mm
Sink Material	AL6063-T5
Thermal Resistance	7.0°C/W
Mass	17.4 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。
*該數據是將散熱模組放置於10x10 mm² 面積的熱源上，在開放式無風流干擾環境中於散熱模組底部正中央量測的溫度。

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with 10*10 mm² heat source.

■ External dimensions(mm)



NOTES:

- All Rights reserved
- Sink Finish : Anodizing Black
- RoHS compliant
- Poron ML32+adhesive : Total thickness 0.6+/-0.2mm

*此產品目錄之規格僅供參考，如有變更無法預先通知，請以業務提供的產品規格書為準。

*更多Sunon 產品資訊請至SUNON網站www.sunon.com瀏覽。

*Specifications are subject to change without notice. Specifications in this catalog are for reference.

*More Sunon products information please visit SUNON website at www.sunon.com.

Set Top Box Thermal Module

SA000-11021



Specifications

Thermal Module Dimension	L35.0xW2xH25.0 mm
Sink Material	AL6063-T5
Thermal Resistance	7.0°C/W
Mass	34.7 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。
*該數據是將散熱模組放置於10x10 mm² 面積的熱源上，在開放式無風流干擾環境中於散熱模組底部正中央量測的溫度。

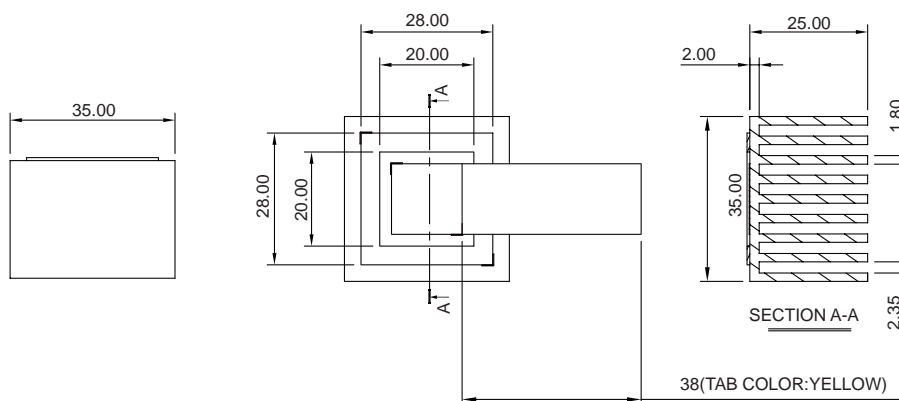
*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with 10*10 mm² heat source.

External dimensions(mm)

NOTES:

- All Rights reserved
- Sink Finish : Anodizing Black
- RoHS compliant
- Poron ML32+adhesive : Total thickness 0.6+/-0.2mm



*此產品目錄之規格僅供參考，如有變更無法預先通知，請以業務提供的產品規格書為準。

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*More Sunon products information please visit SUNON website at www.sunon.com.

Set Top Box Thermal Module

SA000-11022



■ Specifications

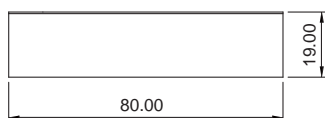
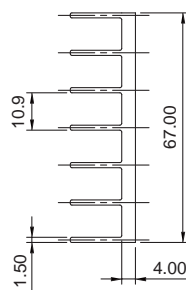
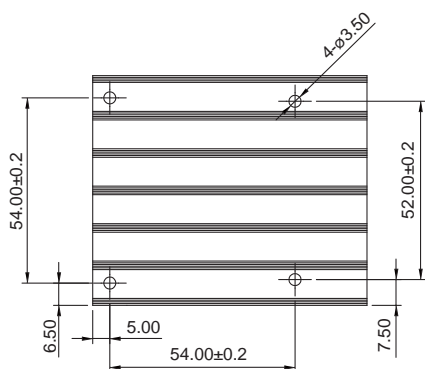
Thermal Module Dimension	L80.0xW67.0xH19.0 mm
Sink Material	AL6063-T5
Thermal Resistance	12.0°C/W
Mass	92.8 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。
 *該數據是將散熱模組放置於10x10 mm² 面積的熱源上，在開放式無風流干擾環境中於散熱模組底部正中央量測的溫度。

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with 10*10 mm² heat source.

■ External dimensions(mm)



NOTES:

- All Rights reserved
- Finish : Degrease

*此產品目錄之規格僅供參考，如有變更無法預先通知，請以業務提供的產品規格書為準。

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*More Sunon products information please visit SUNON website at www.sunon.com.

Set Top Box Thermal Module

SA000-13008



■ Specifications

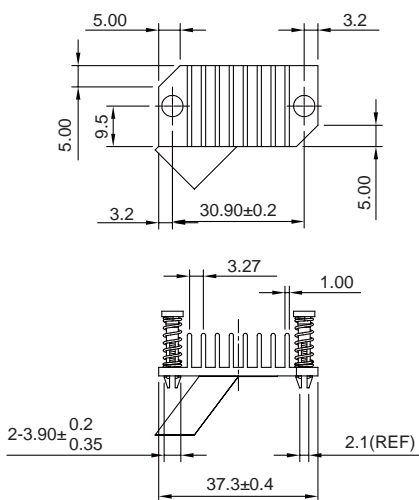
Thermal Module Dimension	L19xW37xH10.0 mm
Sink Material	AL6063-T5
Thermal Resistance	17.0°C/W
Mass	8.5 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。
 *該數據是將散熱模組放置於10x10 mm² 面積的熱源上，在開放式無風流干擾環境中於散熱模組底部正中央量測的溫度。

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

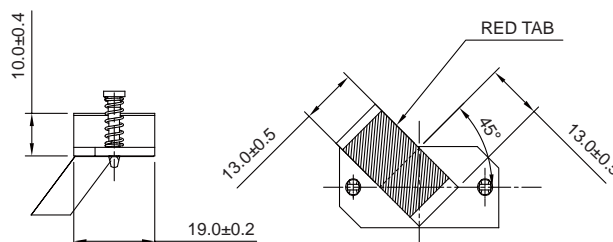
*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with 10*10 mm² heat source.

■ External dimensions(mm)



NOTES:

- All Rights reserved
- Sink Finish : Degrease
- RoHS compliant
- CU PUSH PIN Material : C6802($\frac{1}{2}$ H)
- CU PUSH PIN use hole in PCB \varnothing 2.9mm



*此產品目錄之規格僅供參考，如有變更無法預先通知，請以業務提供的產品規格書為準。

*更多Sunon 產品資訊請至SUNON網站www.sunon.com瀏覽。

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*More Sunon products information please visit SUNON website at www.sunon.com.

Set Top Box Thermal Module

SA000-12024



■ Specifications

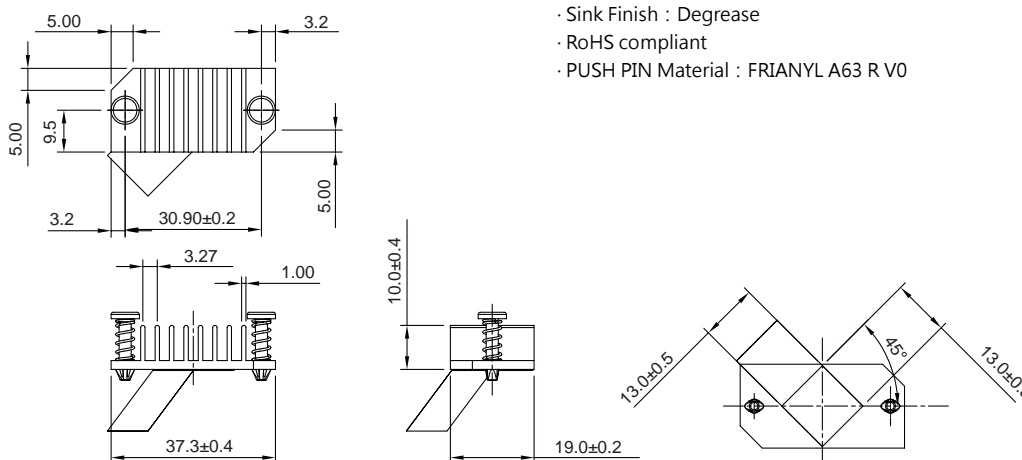
Thermal Module Dimension	L19xW37xH10.0 mm
Sink Material	AL6063-T5
Thermal Resistance	17.0°C/W
Mass	7 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。
*該數據是將散熱模組放置於10x10 mm² 面積的熱源上，在開放式無風流干擾環境中於散熱模組底部正中央量測的溫度。

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with 10*10 mm² heat source.

■ External dimensions(mm)



NOTES:

- All Rights reserved
- Sink Finish : Degrease
- RoHS compliant
- PUSH PIN Material : FRIANYL A63 R V0

*此產品目錄之規格僅供參考，如有變更無法預先通知，請以業務提供的產品規格書為準。

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Set Top Box Thermal Module

SA000-12016



■ Specifications

Thermal Module Dimension	L31xW31xH10.0 mm
Sink Material	AL6063-T5
Thermal Resistance	14.0°C/W
Mass	11.8 g

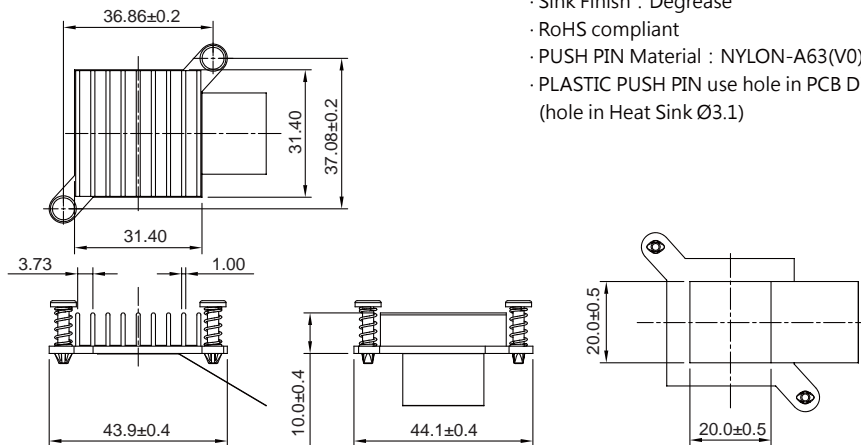
*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。

*該數據是將散熱模組放置於10x10 mm² 面積的熱源上，在開放式無風流干擾環境中於散熱模組底部正中央量測的溫度。

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with 10*10 mm² heat source.

■ External dimensions(mm)



NOTES:

- All Rights reserved
- Sink Finish : Degrease
- RoHS compliant
- PUSH PIN Material : NYLON-A63(V0)
- PLASTIC PUSH PIN use hole in PCB Diameter 2.9 mm (hole in Heat Sink Ø3.1)

*此產品目錄之規格僅供參考，如有變更無法預先通知，請以業務提供的產品規格書為準。

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Set Top Box Thermal Module

SA000-13007



■ Specifications

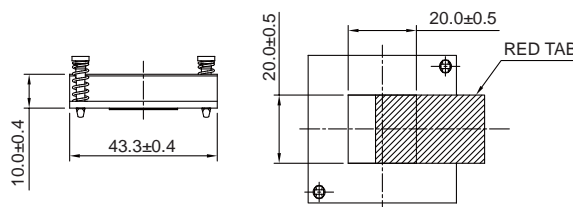
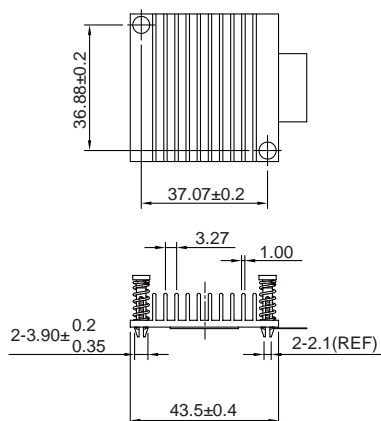
Thermal Module Dimension	L43xW43xH10.0 mm
Sink Material	AL6063-T5
Thermal Resistance	15.0°C/W
Mass	20.1 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。
 *該數據是將散熱模組放置於10x10 mm² 面積的熱源上，在開放式無風流干擾環境中於散熱模組底部正中央量測的溫度。

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with 10*10 mm² heat source.

■ External dimensions(mm)



NOTES:

- All Rights reserved
- Sink Finish : Degrease
- RoHS compliant
- PUSH PIN Material : NYLON-A63(V0)
- CU PUSH PIN Material : C6802($\frac{1}{2}$ H)
- CU PUSH PIN use hole in PCB \varnothing 2.9mm

*此產品目錄之規格僅供參考，如有變更無法預先通知，請以業務提供的產品規格書為準。

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LED Lighting Thermal Module

SA000-11009



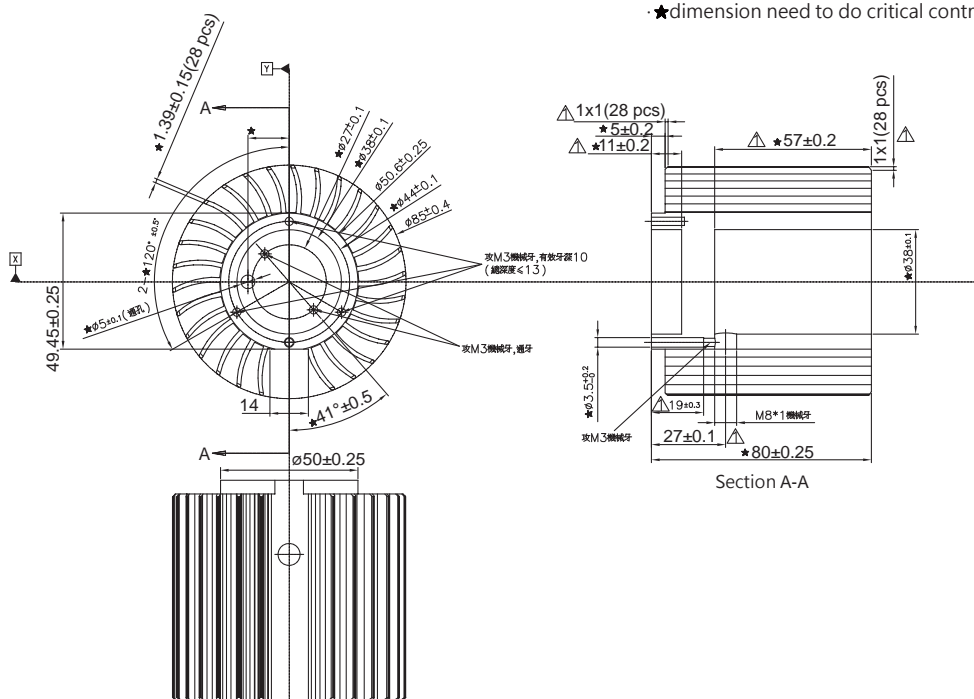
■ Specifications

Thermal Module Dimension	D85xH80 mm
HEAT SINK	AL6063-T5
Thermal Resistance	6°C/W
Mass	462 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

■ External dimensions(mm)



NOTES:

- SINK Finish : Anodized Standard Nature
- RoHS compliant
- ★dimension need to do critical control

*此產品目錄之規格僅供參考，如有變更無法預先通知，請以業務提供的產品規格書為準。

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LED Lighting Thermal Module

SA000-12003



■ Specifications

Thermal Module Dimension	D56xH52 mm
HEAT SINK	AL6063-T5
Thermal Resistance	7.1°C/W
Mass	295 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。
*該數據是將散熱模組放置於10x10 mm² 面積的熱源上，在開放式無風流干擾環境中於散熱模組底部正中央量測的溫度。

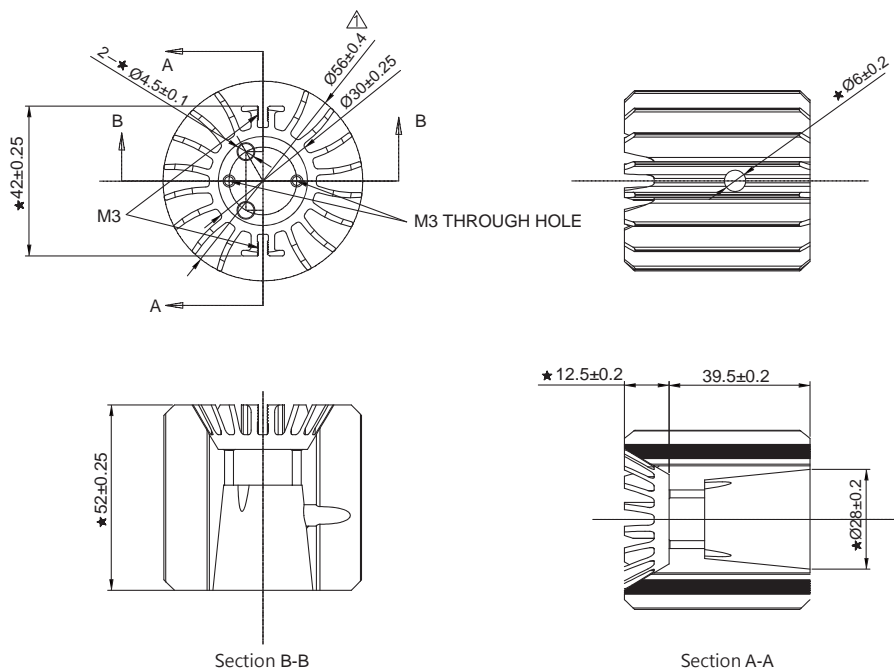
*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with 10*10 mm² heat source.

■ External dimensions(mm)

NOTES:

- SINK Finish : Anodized Standard Black
- RoHS compliant
- ★dimension need to do critical control



*此產品目錄之規格僅供參考，如有變更無法預先通知，請以業務提供的產品規格書為準。

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*More Sunon products information please visit SUNON website at www.sunon.com.

LED Lighting Thermal Module

SA000-12004



Specifications

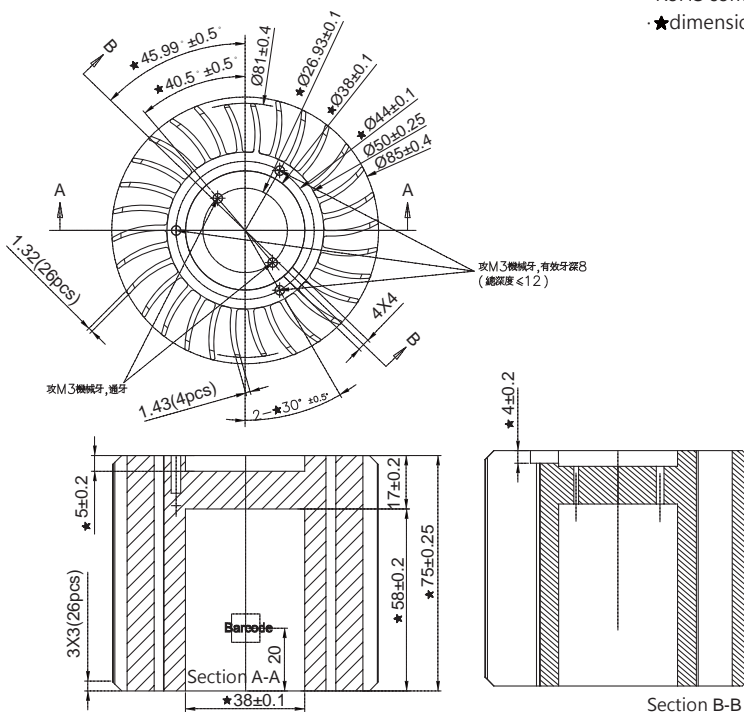
Thermal Module Dimension	D85xH75 mm
HEAT SINK	AL6063-T5
Thermal Resistance	21.4°C/W
Mass	343 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。
*該數據是將散熱模組放置於10x10 mm²面積的熱源上，在開放式無風流干擾環境中於散熱模組底部正中央量測的溫度。

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with 10*10 mm² heat source.

External dimensions(mm)



NOTES:

- SINK Finish : Anodized Standard Black
- RoHS compliant
- ★dimension need to do critical control

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LED Lighting Thermal Module

SA000-12028



■ Specifications

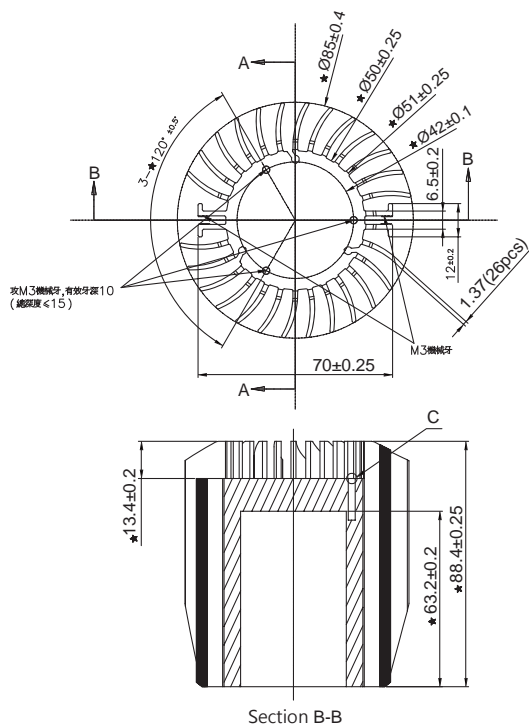
Thermal Module Dimension	D85xH88 mm
HEAT SINK	AL6063-T5
Thermal Resistance	22.9°C/W
Mass	376 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。
*該數據是將散熱模組放置於10x10 mm² 面積的熱源上，在開放式無風流干擾環境中於散熱模組底部正中央量測的溫度。

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

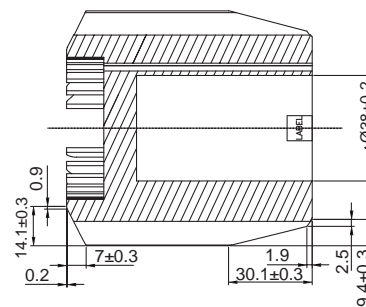
*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with 10*10 mm² heat source.

■ External dimensions(mm)



NOTES:

- SINK Finish : Anodized Standard Black
- RoHS compliant
- ★dimension need to do critical control



Section A-A

3-C0.3X0.3



DETAIL C S=4:1

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LED Lighting Thermal Module

SA000-12045



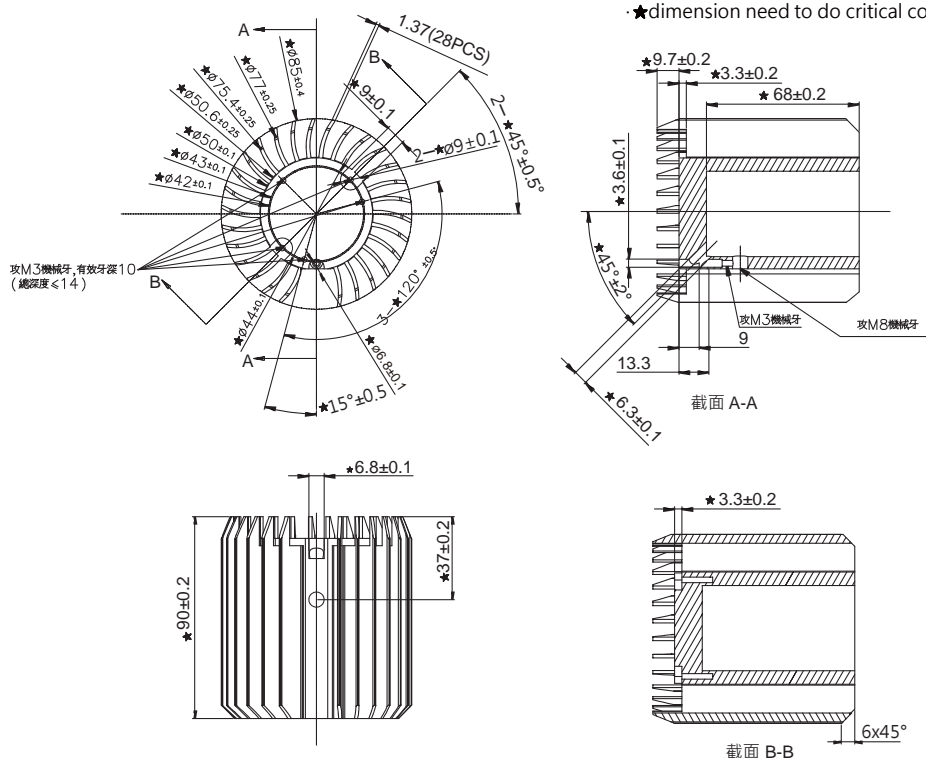
Specifications

Thermal Module Dimension	D85xH88 mm
HEAT SINK	AL6063-T5
Thermal Resistance	6°C/W
Mass	376 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

External dimensions(mm)



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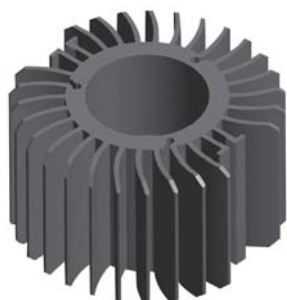
*更多Sunon 產品資訊請至SUNON網站www.sunon.com瀏覽。

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LED Lighting Thermal Module

SA000-12055



■ Specifications

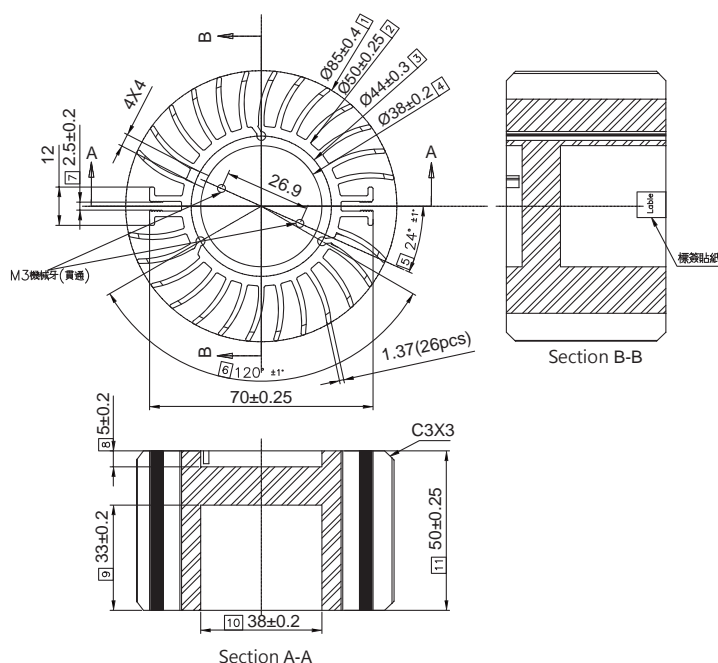
Thermal Module Dimension	D85xH55 mm
HEAT SINK	AL6063-T5
Thermal Resistance	15°C/W
Mass	234 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。
*該數據是將散熱模組放置於10x10 mm² 面積的熱源上，在開放式無風流干擾環境中於散熱模組底部正中央量測的溫度。

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with 10*10 mm² heat source.

■ External dimensions(mm)



NOTES:

- SINK Finish : Anodized Standard Black
- RoHS compliant
- ★dimension need to do critical control

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LED Projector Thermal Module

SA000-11012



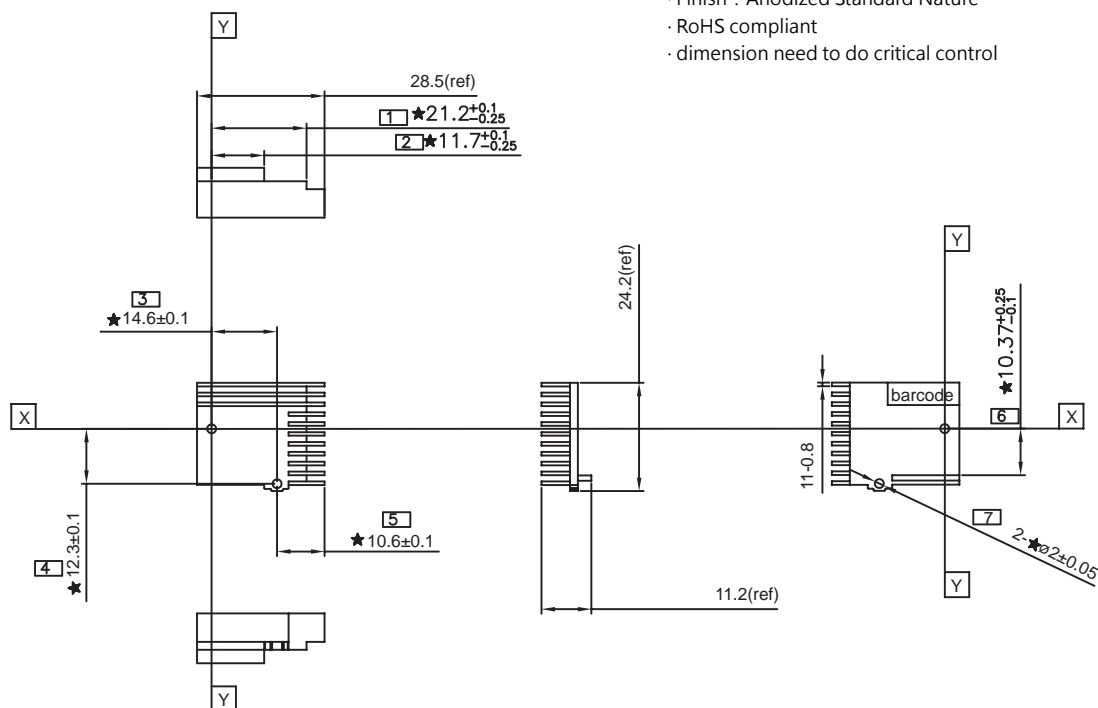
■ Specifications

Thermal Module Dimension	28.5x24.2x11.2 mm
Sink Material	AL6063-T5
Thermal Resistance	6°C/W
Mass	4.6 g

*熱阻(Thermal Resistance) 數值僅供參考·實際數據會因應用產品不同而改變·若需精確數據請將散熱模組置入應用產品中重新量測·

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

■ External dimensions(mm)



NOTES:

- Finish : Anodized Standard Nature
- RoHS compliant
- dimension need to do critical control

*此產品目錄之規格僅供參考·如有變更無法預先通知·請以業務提供的產品規格書為準·

*更多Sunon 產品資訊請至SUNON網站www.sunon.com瀏覽·

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LED Projector Thermal Module

SC000-12001



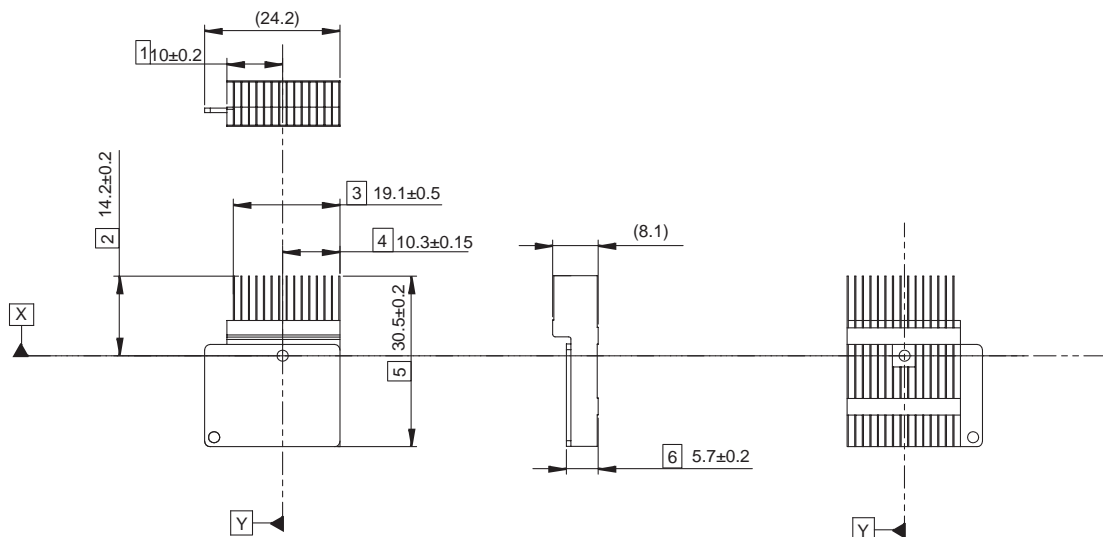
■ Specifications

Thermal Module Dimension	30.5x24.2x8.1 mm
Fin Material	C1100
Block Material	C1100
Thermal Resistance	6°C/W
Mass	8.5 g

*熱阻(Thermal Resistance) 數值僅供參考，實際數據會因應用產品不同而改變，若需精確數據請將散熱模組置入應用產品中重新量測。

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

■ External dimensions(mm)



NOTES:

- RoHS compliant
- dimension need to do critical control

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LED Projector Thermal Module

SA000-12031



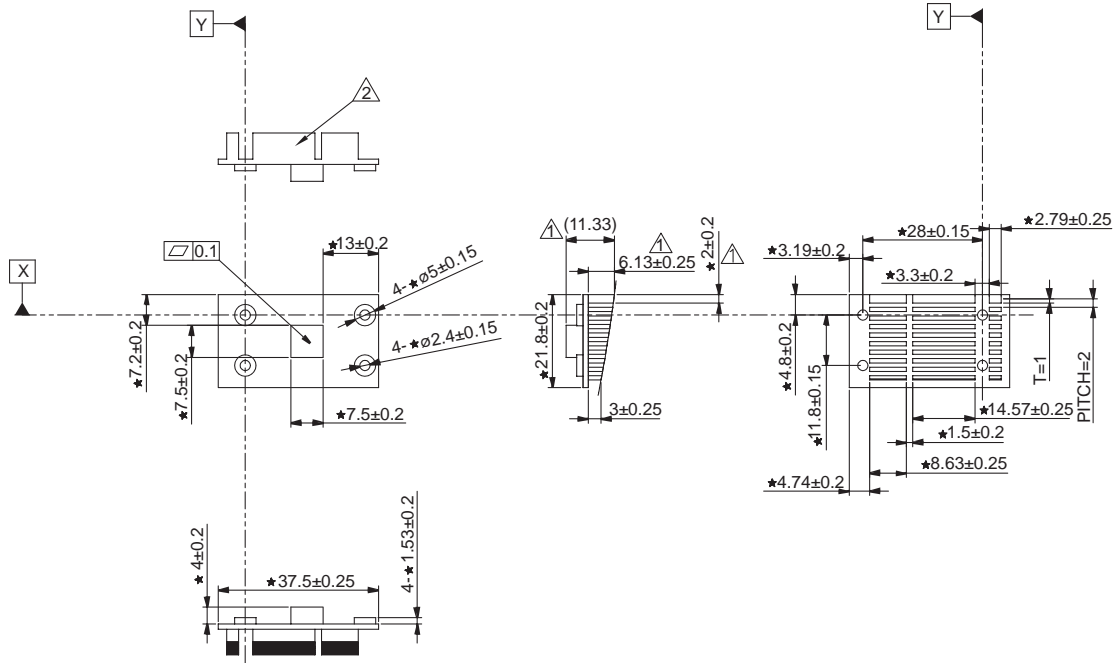
Specifications

Thermal Module Dimension	37.5x21.8x8.2 mm
Fin Material	AL6063-T5
Thermal Resistance	6°C/W
Mass	5.3 g

*熱阻(Thermal Resistance) 數值僅供參考·實際數據會因應用產品不同而改變·若需精確數據請將散熱模組置入應用產品中重新量測·

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

External dimensions(mm)



NOTES:

- RoHS compliant
- dimension need to do critical control

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LED Projector Thermal Module

SA101-12004



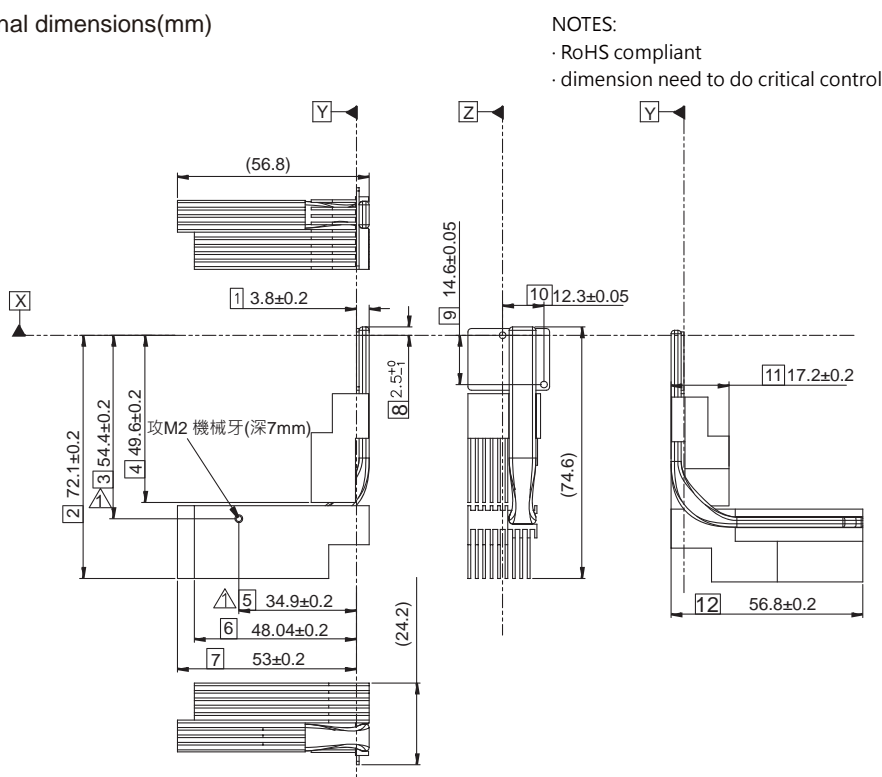
Specifications

Thermal Module Dimension	74.6x56.8x24.2 mm
Sink Material	AL6063-T5
Block Material	C1100
Pipe Material	CU
Thermal Resistance	6°C/W
Mass	44 g

*熱阻(Thermal Resistance) 數值僅供參考·實際數據會因應用產品不同而改變·若需精確數據請將散熱模組置入應用產品中重新量測·

*1 Thermal Resistance is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

External dimensions(mm)



NOTES:

- RoHS compliant
- dimension need to do critical control

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Sunon China (Shen Zhen Office)

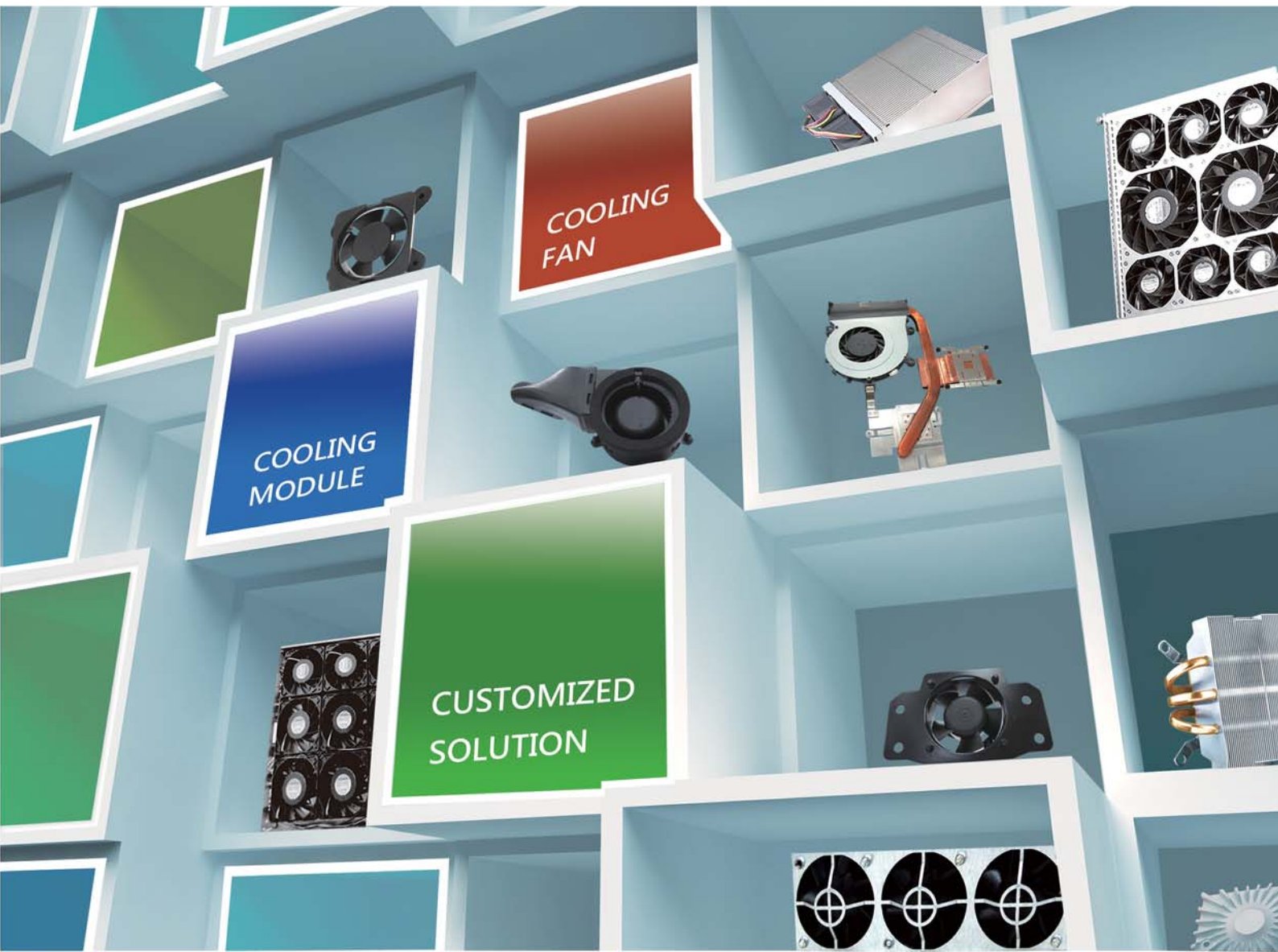
TEL : +86-755-26880688
E-mail : sunon@email.sunon.com.tw

Sunon Taipei Office (Taipei)

TEL : +886-2-27992383

Total Thermal Solution

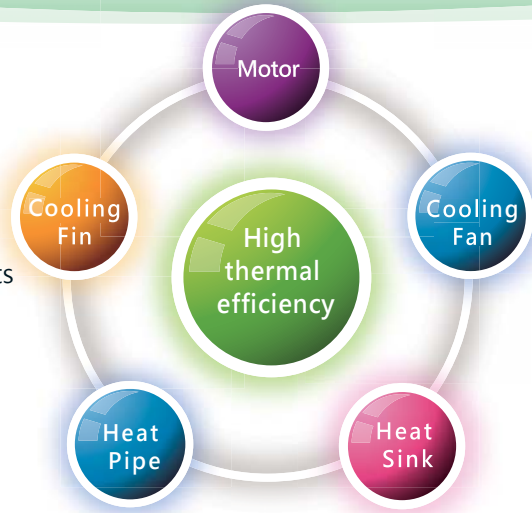
High all-encompassing design High cost-efficient solution



Sunon Offers Heat Dissipation Total Solution Technology and Services

■ SUNON's Total Solution :

- ✓ Increases product profitability
- ✓ Reduces development costs and increases profits
- ✓ Decreases prototype development time
- ✓ Provides the most economic design solution



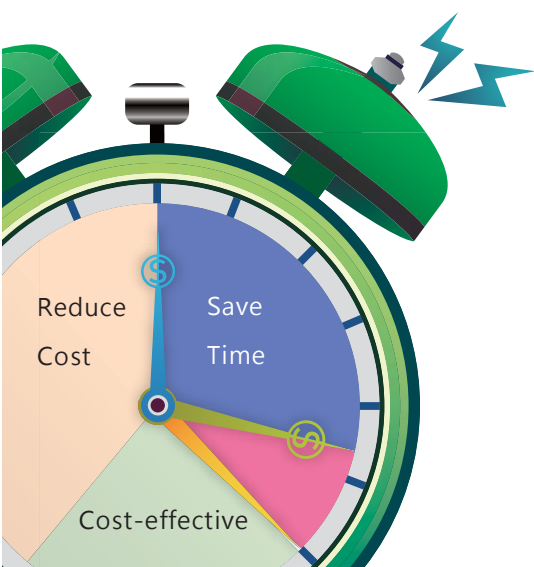
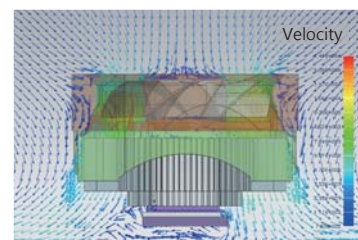
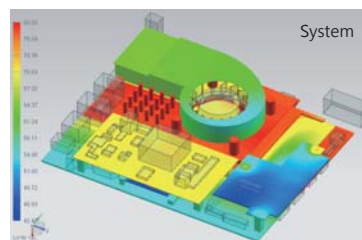
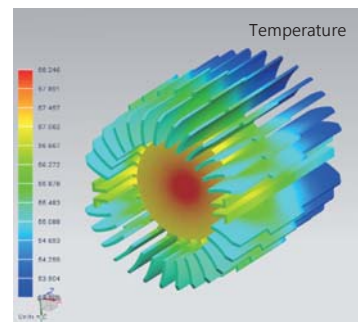
With over 30 years experience, Sunon has been concentrating on the research and development of motor core techniques, which has given Sunon a vast clientele with a wide assortment of system experiences and cooling problem-solving abilities. Sunon has been utilizing state-of-the-art equipment and innovative techniques to tailor-make the optimized cooling systems for our clients' latest concept commodities. From function, accessory shape and cost, to perception about commodity experience, Sunon has been paying careful attention to meet clients' particular goals and requirements.

Sunon's total solutions offer a variety of customized cooling products to our clients. Moreover, we offer customized accessory and assembly orders, such as: complicated parts and accessory design, production for fan sets with greater cooling ability, fan mounting parts and accessories, optional fan anti-vibration sleeves, anti-vibration pad, wind-guide-cover tailor-made for the flow channel, as well as spare handle design for fast change of fans for long-running equipment. We provide our clients with complete modules to speed up development of their product prototypes.

■ Thermal Solution Design Simulation Analysis

Provider :

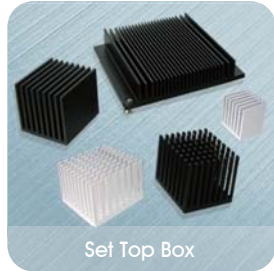
- Individual module and system thermal analysis
- Custom CM design
- Vent Optimization
- Temperature distribution
- Velocity profile
- Pressure distribution



■ SUNON Customization Capability



Industrial PC



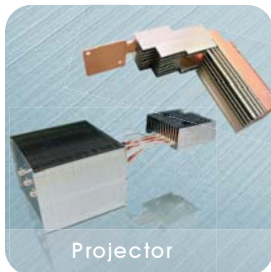
Set Top Box



Server



Notebook



Projector



All in One PC



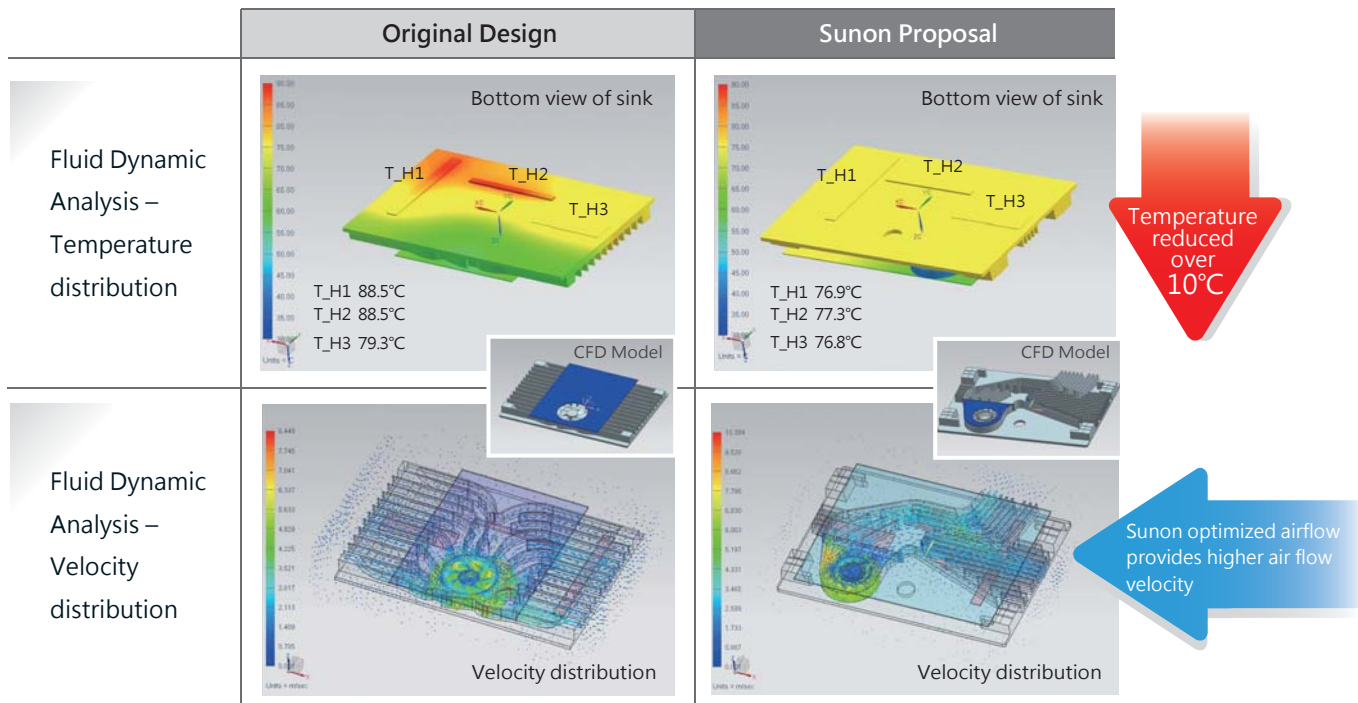
Automotive Module



LED Lighting

■ Thermal simulation case study

Successful case Car Stereo Amplifiers : Sunon's total solutions cooling techniques effectively solve car stereo amplifiers' cooling problem. Sunon provides thermal analysis on modules and systems and highly reliable cooling optimized designs. Compared with clients' original designs, Sunon's optimized designs effectively lower temperature by over **10°C** to prolong client's products' service life and enhance their products' efficiency.



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E-mail : sunon@email.sunon.com.tw



ES Rectangle . RS
10.4~49.4W

LED Module maximum operating temperature(Tc) <105°C

- BXRA-xxx0800/0950/1100 (10.4W)
- BXRA-xxx1200/1350/1600 (14.8W)
- BXRA-xxx2000/1350/2600 (25.9W)
- BXRA-xxx3500/4000/4500-F-00 (31.8W)
- BXRA-xxx4000/4500/5300-H-00 (49.4W)

CL-L340
47.3W

LED Module maximum operating temperature(Tc) <100°C

- CL-L340-MC41N1-C1 (47.3W)
- CL-L340-MC41W1-C (47.3W)
- CL-L340-MC41WW1-C (47.3W)
- CL-L340-MC41L1-C (47.3W)
- CL-L340-MC41L2-C (47.3W)
- CL-L340-C41N-C (47.3W)

PrevaLED
11.5~51.6W

LED Module maximum operating temperature(Tc) <85°C

- PL-CORE-Z3-1000 (11.5W)
- PL-CORE-Z3-2000 (21.4W)
- PL-CORE-Z3-3000 (32.5W)
- PL-CORE-Z3-5000 (51.6W)

Fortimo SLM
23~45W

LED Module maximum operating temperature(Tc) <75°C

- 2000lm G3 (23W)
- 3000lm G3 (33W)
- 4000lm G3 (45W)
- 4500lm G3 (45W)

TALEXX
21.5~41.0W

LED Module maximum operating temperature(Tc) <90°C

- STARK-SLE-G3-19-2000-SEL (21.5 W)
- STARK-SLE-G3-19-3000-SEL (32.5 W)
- STARK-SLE-G3-23-3000-SEL (30.0 W)
- STARK-SLE-G3-19-2000-SEL (40.9 W)
- STARK-SLE-G3-23-4000-SEL (41.0 W)

LUGA Shop
28.8~54.4W

LED Module maximum operating temperature(Tc) <85°C

- WU-M-461 (28.8W)
- WU-M-462 (42.0W)
- WU-M-464 (54.4W)



Size : Ø86 x 30.4mm	Size : Ø86 x 45.4mm	Size : Ø86 x 52.4mm
LA001-018A81DY (aluminum colour 5V)	LA004-024A83DY (aluminum colour 5V)	LA006-006A83DY (aluminum colour 5V)
LA001-018B81DY (black 5V)	LA004-024B83DY (black 12V)	LA006-006B83DY (black 5V)
LA001-019A81DY (aluminum colour 12V)	LA004-025A83DY (aluminum colour 12V)	LA006-007A83DY (aluminum colour 12V)
LA001-019B81DY (black 12V)	LA004-025B83DY (black 12V)	LA006-007B83DY (black 12V)
Weight (g) 112	Weight (g) 194	Weight (g) 234
Fan Speed (RPM) 2200	Fan Speed (RPM) 2200	Fan Speed (RPM) 2200
Noise @ 1M, (dB(A)) 17.0	Noise @ 1M, (dB(A)) 17.0	Noise @ 1M, (dB(A)) 17.0
Zhaga Zhaga hole : Book3	Zhaga Zhaga hole : Book3	Zhaga Zhaga hole : Book3



ES Rectangle
RS
85.4W

LED Module maximum operating temperature (Tc) <105°C

- BXRA-XXX7000/7500/9000-J-00 (85.4W)



Size : 121 x 92.3 x 66.0 mm
LM310-003A99DN
Weight (g) 352
Fan Speed (RPM) 2200
Noise @ 1M, (dB(A)) 17.8



COB
10.9~42.9W

LED Module maximum operating temperature (Tc) <100°C

- CLL032-1205A5 (10.9W)
- CLL032-1205A5 (26.8W)
- CLL032-1206A5 (13.0W)
- CLL032-1206A5 (32.2W)
- CLL032-1208A5 (17.4W)
- CLL032-1208A5 (42.9W)
- CLL032-1212A5 (26.1W)
- CLL042-1218A5 (39.1W)



Size : Ø86 x 40.4mm
LA003-014A82DN (aluminum colour 12V)
LA003-014B82DN (black 12V)
Weight (g) 163
Fan Speed (RPM) 2200
Noise @ 1M, (dB(A)) 16.5



COB
89.3~177.9W

LED Module maximum operating temperature (Tc) <100°C

- CLL044-1212 (89.3W)
- CLL044-1812 (134W)
- CLL044-1818 (86.7W)
- CLL044-1818 (128.1W)
- CLL054-1825 (120.4W)
- CLL054-1825 (177.9W)



Size : 121 x 92.3 x 66.0 mm
LM310-001A99DN
Weight (g) 352
Fan Speed (RPM) 2200
Noise @ 1M, (dB(A)) 17.8



Partner
GE Lighting
Infusion
13.5~40W

LED Module maximum operating temperature (Tp) <65°C

- Gen3 M1000 Series (13.5W)
- Gen3 M1500 Series (20W)
- Gen3 M2000 Series (27W)
- Gen3 M3000 Series (40W)



Size : Ø86x40.4mm
LA003-013A82DY (Aluminum colour 5V)
LA003-013B82DY (Black 5V)
LA003-012A82DY (Aluminum colour 12V)
LA003-012B82DY (Black12V)
Weight (g) 163
Fan Speed (RPM) 2200
Noise @ 1M, (dB(A)) 16.5



Size : Ø86x57.4mm
LA004-017A83DY (Aluminum colour 12V)
LA004-017B83DY (Black 12V)
Weight (g) 268
Fan Speed (RPM) 2200
Noise @ 1M, (dB(A)) 15.9



Fortimo SLM
23~33W

LED Module maximum operating temperature (Tc) <75°C

- 2000lm Gen3 (23W)
- 3000lm Gen3 (33W)



Size : Ø99 x 110mm
SM203-13002
Weight (g) 211
AL1050
Heat Sink Material ADC10
C1100
*1 TDP (W) 23.8
*2 Thermal Resistance (°C/W) 1.38
ΔT (°C) 32.9
Zhaga Zhaga hole : Book3

*1 TDP (Thermal Design Power) is for reference only. Actual thermal performance may vary by different applications. Please test it again by using on different applications.

*2 Thermal resistance is measured from the bottom middle of heat sink in free air without airflow obstructions, with PHILIPS(Fortimo LED SLM 3000 33W/930 L19 G3) LED chip.

■ Cooling Fan



Specifications

Model No.	EF30080S2-E00U-A99	HA30101V3-E00U-A99	HA40101V3-E00U-A99	HA60200V3-E00U-A99	HA60201V3-E00U-A99
Fan Dimension (mm)	φ 30 x 8	φ 39.8 x 10.4	φ 48.9 x 10.6	φ 84.9 x 20.4	φ 84.9 x 20.4
Weight (g)	4.3	7.3	11.8	30.5	30.5
Rated Voltage (V)	3.3 / 5	12	12	5	12
Power Consumption (W)	0.20 / 0.40	0.30	0.32	0.31	0.34
Fan Speed (RPM)	4300 / 7000	4400	3900	2300	2300
Air Flow (CFM)	1.8 / 3.0	1.9	4.5	13	13
Static Pressure (Inch-H ₂ O)	0.03 / 0.08	0.04	0.05	0.03	0.03
Noise @ 1M (dB(A))	3.1 / 17.0	10.5	13.1	17.5	17.5
Safety	UL / CUR / TUV / CE	UL / CUR / TUV / CE	UL / CUR / TUV / CE	UL / CUR / TUV / CE	UL / CUR / TUV / CE



Specifications

Model No.	HA60150V3-E03U-A99	HA60151V3-E00U-A99	HA60150V3-E02U-A99	HA60151V3-E01U-A99
Fan Dimension (mm)	φ 84.9 x 15.4	φ 84.9 x 15.4	φ 84.9 x 15.4	φ 84.9 x 15.4
Weight (g)	29.1	29.1	27.3	27.3
Rated Voltage (V)	5	12	5	12
Power Consumption (W)	0.26	0.28	0.40	0.34
Fan Speed (RPM)	2300	2300	2300	2300
Air Flow (CFM)	9.7	9.7	13.2	13.2
Static Pressure (Inch-H ₂ O)	0.03	0.03	0.03	0.03
Noise @1M (dB(A))	15.4	15.4	16.1	16.1
Safety	UL / CUR / TUV / CE	UL / CUR / TUV / CE	UL / CUR / TUV / CE	UL / CUR / TUV / CE

■ Dustproof & Waterproof Cooling Fan

IP56 Rating



Specifications

Model No.	GF60151B6-1E00U-AC9	GF60151B7-1E00U-AC9	GF60151B8-1E00U-AC9	GF60151B9-1E00U-AC9	GF60151B9-1E01U-AC9
Fan Dimension (mm)	60 x 60 x 15	60 x 60 x 15	60 x 60 x 15	60 x 60 x 15	φ 84.9 x 15.4
Weight (g)	47.0	47.0	47.0	47.0	45.0
Rated Voltage (V)	12	12	12	12	12
Power Consumption (W)	1.5	0.96	0.84	0.39	0.3
Fan Speed (RPM)	4500	3900	3200	2300	2200
Air Flow (CFM)	21.3	18.2	14.5	10.6	9.8
Static Pressure (Inch-H ₂ O)	0.18	0.13	0.09	0.05	0.05
Noise @ 1M (dB(A))	34.5	29.8	24.9	17.1	17.1
Safety	UL / CUR / TUV / CE	UL / CUR / TUV / CE	UL / CUR / TUV / CE	UL / CUR / TUV / CE	UL / CUR / TUV / CE

IP68 Rating



Specifications

Model No.	GF60151B6-1E00U-AE9	GF60151B7-1E00U-AE9	GF60151B8-1E00U-AE9	GF60151B9-1E00U-AE9	GF60151B9-1E01U-AE9
Fan Dimension (mm)	60 x 60 x 15	60 x 60 x 15	60 x 60 x 15	60 x 60 x 15	φ 84.9 x 15.4
Weight (g)	47.0	47.0	47.0	47.0	45.0
Rated Voltage (V)	12	12	12	12	12
Power Consumption (W)	1.56	1.26	1.08	0.54	0.48
Fan Speed (RPM)	4500	3900	3200	2300	2200
Air Flow (CFM)	21.3	18.2	14.5	10.6	9.8
Static Pressure (Inch-H ₂ O)	0.18	0.13	0.09	0.05	0.05
Noise @ 1M (dB(A))	34.5	29.8	24.9	17.1	17.1
Safety	UL / CUR / TUV / CE	UL / CUR / TUV / CE	UL / CUR / TUV / CE	UL / CUR / TUV / CE	UL / CUR / TUV / CE

SUNON®

Mighty Mini Fan & Blower

*All products are ROHS compliant.



Dustproof & Waterproof



Halogen Free



10X10x3 mm



12x12x3 mm



15x15x3 mm



17x17x3 mm

Mighty Mini Fan

Size (mm)	Model (IP55)	Model (IP58)	Rating Voltage (V)	Operating Voltage (V)	Power Current (mA)	Power Consumption (Watts)	Speed (RPM)	Air Flow (l/min)	Static Pressure (Pa)	Noise (dB(A))
10x10x3	UF3A3-500	UF3A3-500B	3	2.0-3.5	96	0.29	17000	3.43	10.44	21.0 / 30cm
	UF3A3-700	UF3A3-700B								
12x12x3	UF3C3-500	UF3C3-500B	3	2.0-3.5	97	0.3	16500	5.95	18.91	28.3 / 20cm
	UF3C3-700	UF3C3-700B								
15x15x3	UF3F3-500	UF3F3-500B	3	2.0-3.5	36	0.1	14500	8.75	20.36	30.0 / 30cm
	UF3F3-700	UF3F3-700B								
17x17x3	UF3H3-500	UF3H3-500B	3	2.0-3.5	37	0.1	13000	16.27	21.21	32.0 / 30cm
	UF3H3-700	UF3H3-700B								



9x9x3 mm



12X12x3 mm



15x15x3 mm



17x17x3 mm



30x30x3 mm

Mighty Mini Blower

Size (mm)	Model (IP55)	Model (IP58)	Rating Voltage (V)	Operating Voltage (V)	Power Current (mA)	Power Consumption (Watts)	Speed (RPM)	Air Flow (l/min)	Static Pressure (Pa)	Noise (dB(A))
9x9x3	UB393-500	UB393-500B	3	2.0-3.5	92	0.28	17400	1.17	16.17	25.0 / 30cm
	UB393-700	UB393-700B								
12x12x3	UB3C3-500	UB3C3-500B	3	2.0-3.5	36	0.1	15500	2.67	22.96	26.0 / 30cm
	UB3C3-700	UB3C3-700B								
15x15x3	UB3F3-500	UB3F3-500B	3	2.0-3.5	38	0.1	14000	4.53	33.85	30.0 / 30cm
	UB3F3-700	UB3F3-700B								
17x17x3	UB3H3-500	UB3H3-500B	3	2.0-3.5	37	0.1	12500	6.50	40.34	32.0 / 30cm
	UB3H3-700	UB3H3-700B								
30x30x3	UB5U3-500	UB5U3-500B	5	2.0-6.0	72	0.36	9500	18.00	88.18	36.0 / 30cm
	UB5U3-700	UB5U3-700B								

※ If you need special specification. Please contact SUNON sales.

※ Specifications are subject to change without notice. Specifications in this catalog are for reference.

※ More SUNON products information please visit SUNON website at www.sunon.com.



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